

PRINCE ALBERT LOCAL MUNICIPALITY

SPATIAL DEVELOPMENT FRAMEWORK REPORT

Department of Rural Development and Land Reform

14 Long Street

6th floor

Cape Town

8000

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Prince Albert Spatial Development Framework (SDF)

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Aurecon South Africa (Pty) Ltd
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Aurecon Centre
1 Century City Drive
Waterford Precinct
Century City
Cape Town
7441

PO Box 494
Cape Town
8000
South Africa

T +27 21 526 6029
F +27 21 526 9500
E capetown@aurecongroup.com
W aurecongroup.com

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Acronyms

CBA	Critical Biodiversity Area
CKDM	Central Karoo District Municipality
CRDP	Comprehensive Rural Development Program
DEA	Department of Environmental Affairs
DEDAT	Department of Economic Development and Tourism
DFA	Development Facilitation Act (Act 67 of 1995)
DOA	Department of Agriculture
DRDLR	Department of Rural Development and Land Reform
DTPW	Department of Transport and Public Works
EIA	Environmental Impact Assessment
GIS	Geographical Information System
IDP	Integrated Development Plan
LM	Local Municipality
LUMS	Land Use Management System
MEC	Member of Executive Council
MIG	Municipal Infrastructure Grant
MSA	Municipal Systems Act (Act 32 of 2000)
PGDS	Provincial Growth and Development Strategy
PSDF	Provincial Spatial Development Framework
RBIG	Regional Bulk Infrastructure Grant
SDF	Spatial Development Framework
SPC	Spatial Planning Category
SPLUMA	Spatial Planning and Land Use Management Act (Act 16 of 2013)

1 Introduction

In terms of Section 26 of the Municipal Systems Act, 2000 (Act 32 of 2000) Prince Albert Local Municipality hereby presents its Spatial Development Framework, further also referred to as the PASDF.

The Prince Albert Local Municipality Spatial Development Framework is prepared to support, inform and advise the Integrated Development Plan (IDP) of the Local Municipality. The Vision, Mission Statements, Objectives and Strategies contained in the IDP are taken into account in compiling the SDF to seamlessly integrate and synthesise the goals of the Municipality. The SDF will also provide guidelines for the Land Use Management System. The SDF is not a prescriptive document or detailed development Plan, but forms part of a number of development guideline Policies and Frameworks and provide a spatial vision over a 20 year period. The SDF is in essence a rural SDF, addressing aspects that are unique to rural areas.

1.1 Purpose of the SDF

The purpose of the project is to create a credible SDF for Prince Albert that meets the required standards set by the Provincial government through the implementation of the Comprehensive SDF Guidelines developed by DRDLR in 2010.

2 Context

2.1 Legislative and Policy Context

Vertical integration:

The SDF forms a link in a larger chain of Planning Policies, Legislation and Guidelines. South Africa forms part of the African Continent and interacts in a spatial manner economically, socially, environmentally and physically with neighbouring countries on the continent, as well as with countries across the oceans.

These external influences are better described in the National Spatial Development Perspective (NSDP). The NSDP also coordinates the overall relationship within South Africa between Provinces, Regions and Local Municipalities to ensure that the preferred Developmental Principles be reached in an optimal manner.

Furthermore, the NSDP relates to the nine Provincial SDF's, which seamlessly integrates into the vision and goals of the NSDP. The Provincial SDF's provides the needed impetus to create momentum for the District SDF's. The main principles for the Province are laid out for the District, which is discussed in further detail in the District SDF.

Finally, on operational level, the Local SDF's give way to most of the implementation of the Policies carried over from the National, Provincial and District SDF's. The Local SDF focuses on manners to implement the higher level strategies on a localised level. The Local SDF is the main forward planning instrument in the hands of the developer, the Local Municipality and members of the public.

Various other Policies, Programmes and Legislature on a National, Provincial and District Level is treated in the same manner to ensure a seamless vertical integration of broader and higher level goals to be implemented on a local scale.

Horizontal integration:

The Prince Albert Local Municipality forms an integral part of the local area and has delicate relationships and interaction with surrounding regions on the same level. Bio-regions, which will be described in more detail under **Section 3.1**, interact across adjacent municipal boundaries. Unfortunately, administrative boundaries e.g. ward boundaries and municipal boundaries were not always created to be subject to the bio-regions that exist. Various overlapping bio-regions may exist and finding water tight boundaries, is a difficult task. Because of the organic nature of the bio-regions, their boundaries may shift over time and differ for different functions, be it economical, ecological or social. The fact of the matter is that bio-regions are the true reflection of the actual reality of life that takes place every day and ignoring the bio-regions would be a critical mistake.

Therefore, interaction with adjacent Local Municipalities is of the utmost importance and any Planning Policies or Programmes should be coordinated between these Local Municipalities.

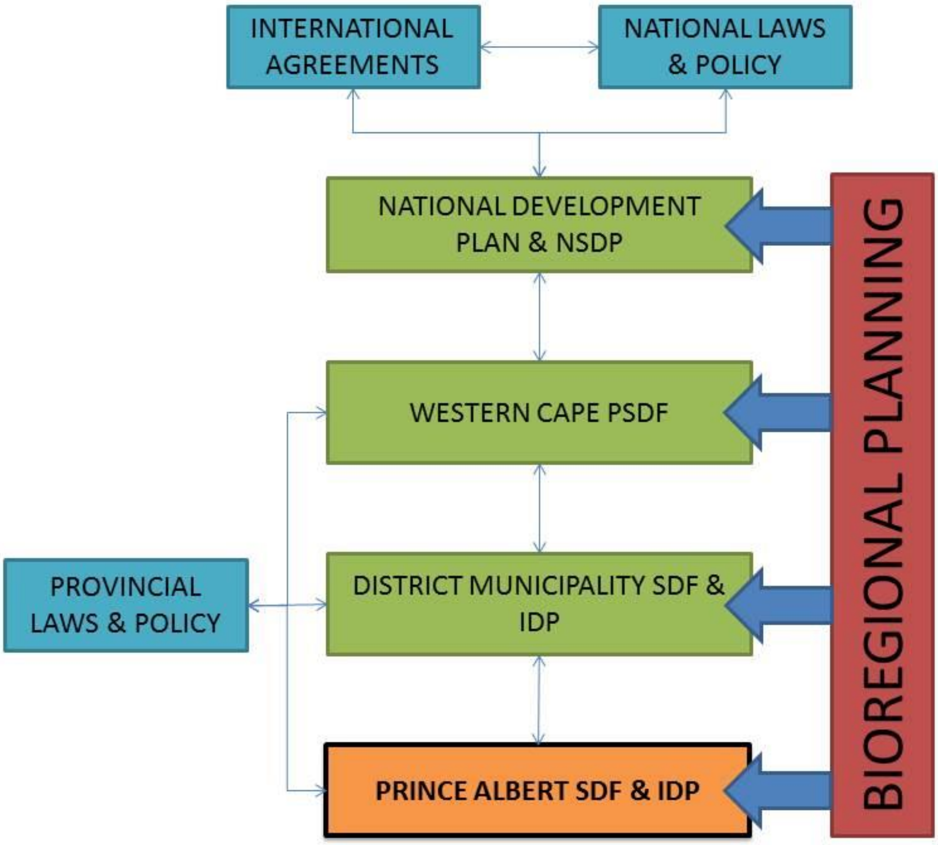
Various activities take place close to the municipal borders and thereby influence and are being influenced by neighbouring Municipalities. It may be that projects had been identified in close proximity to municipal borders and special attention will be paid to it.

Features may be identified such as interregional aspects, e.g. road networks, which supply goods and services and attract development. The Road Network and major routes connecting the adjacent Municipalities will be studied and Strategies formed.

The Local SDF also interacts with various localised Legislation and local Policies, Sector Plans, Programmes, etc. The horizontal relationship between all local planning instruments needs to be defined. The Local SDF will aim to integrate all the local instruments (with a spatial element) into an integrated whole that is easy to use and understand.

Figure 1 below provides a graphic illustration of the vertical and horizontal alignment as discussed above.

Figure 1 | Vertical & Horizontal Alignment



2.1.1 International Legislation, Policies, Programmes and Frameworks

In terms of Legislation, Policies and Frameworks, various international agreements had been signed between South Africa and other countries to uplift the poor, protect our environment, etc. Various goals had been set and needs to be taken into account, even on a local level. The following are selected international agreements that may be more relevant to the Prince Albert Local Municipality.

2.1.1.1 United Nations - Millennium Development Goals

Member states of the United Nations and various other world organisations signed an agreement in New York in September 2000 to reach eight international goals by the year 2015. The goals address extreme poverty and all its facets, gender equality, education, environmental sustainability and basic human rights i.e. the right to health, education, shelter and security.[1]

Implications for Prince Albert Local Municipality:

- Analyse the status quo conditions of Prince Albert Local Municipality in terms of the goals; identify the current shortcomings and mitigation measures that should be applied to attempt to reach the goals.

2.1.1.2 United Nations - Agenda 21

Agenda 21 is a comprehensive Global, National and Local Plan of action to be executed by the United Nations System, Government and major groups in all areas. The Rio Declaration of Environment and Development and the Statement of Principles for the Sustainable Management of Forests were adopted by 178 Governments in Rio de Janerio, Brazil in 1992. The full implementation of Agenda 21 was reaffirmed at the World Summit on Sustainable Development held in Johannesburg in 2002. [2]

Institutional responsibility in this area lies within three ministries: that for the Southern African Development Community (SADC), Foreign Affairs, and Trade and Industry. South Africa has responded by various changes in legislation and policies, e.g. the National Environmental Management Act 107 of 1998, a Policy on Integrated Pollution Control and Waste Management, a Policy on Conservation and Sustainable Utilisation of South Africa's Biological Diversity and the National Water Act 36 of 1998, amongst others. [3]

Local Agenda 21

Various national governmental departments had been tasked to deal with implications emanating from the International Agenda 21, e.g. Dept. Environmental Affairs, Dept. of Tourism, Dept. of Minerals and Energy, Dept. of Local Government, Dept. of Human Settlements, Dept. of Rural Development and Land Reform, etc. insofar matters pertaining to Agenda 21 are relevant.

[1] UNITED NATIONS. 2000. United Nations Millennium Development Goals. http://www.un.org/millenniumgoals/bkgd.shtml. Date of access: 16 Mar 2012.
[2] UNITED NATIONS. 1992. United Nations Department of Economic and Social Affairs: Division for sustainable development. http://www.un.org/esa/dsd/agenda21/. Date of access: 16 Mar 2012.
[3] UNITED NATIONS. 1997. Economic aspects of sustainable development in South Africa. http://www.un.org/esa/agenda21/natlinfo/countr/safrica/eco.htm. Date of access: 16 Mar 2012.

Key elements to be addressed by the SDF contained in the Local Agenda 21 are the following:

- Environmental matters
- Sustainable Development
- Public participation
- Formation of strategic partnerships
- Performance measures of the above-mentioned targets

Implications for Prince Albert Local Municipality:

- Identify and promote cost-effective and more efficient transport systems.
- To review and develop policies to support the best possible use of land and the sustainable management of land resources
- To improve and strengthen planning, management and evaluation systems for land and land resources.

2.1.1.3 New Partnership for Africa's Development (NEPAD)

NEPAD is a Programme of the African Union (AU) adopted in Lusaka, Zambia in 2001. The aim of the Programme is to pursue new priorities and approaches to the political and socio-economic transformation of Africa. Its objective is to promote growth, development and participation in the global economy.

NEPAD is about consolidating and accelerating gains made in Africa, a call for new relationships in Africa and with the international community, especially the highly industrialised countries. The Programme is a declaration that Africans will no longer allow to be conditioned by circumstances and determine its own destiny. [4]

Implications for Prince Albert Local Municipality:

- The PASDF will provide direction to assist the Local Municipality to implement measures to uplift its people to rise up over its circumstances.

[4] NEW PARTNERSHIP FOR AFRICA'S DEVELOPMENT. 2001. NEPAD's Principles, Programme of Action, Priorities and desired Outcomes. http://www.nepad.org. Date of access: 16 Mar 2012.

2.1.2 National Legislation, Policies, Programmes and Frameworks

2.1.2.1 Constitution of the Republic of South Africa, 1996[5]

The Constitution is the supreme law of the land. The Bill of Rights enshrines the rights of all people in our Country and affirms the democratic values of human dignity, equality, and freedom.

- Section 24: Everyone has the right to an environment, which is not harmful to their health or well-being.
- Section 26(1): Everyone has the right to have access to adequate housing.
- Section 152 spells out the objectives of Local Government as insuring access to at least basic services and facilitating economic development within a framework of financial sustainability.

Implications for Prince Albert Local Municipality:

- The PASDF will aim to address the listed sections above.

2.1.2.2 Spatial Planning and Land Use Management Act (2013)[6]

This SDF is regulated and informed by the Spatial Planning and Land Use Management Act. The Spatial Planning and Land Use Management Act, 2013 (SPLUMA) is a framework act for all spatial planning and land use management legislation. It seeks to promote consistency and uniformity in procedures and decision-making in this field.

The principles for SDF's as contained in Section 7 of Chapter 2 are listed below. These principles are described in more detail in the SDF.

- The principle of **SPATIAL JUSTICE**
- The principle of **SPATIAL SUSTAINABILITY**
- The principle of **EFFICIENCY**
- The principle of **SPATIAL RESILIENCE**
- The principle of **GOOD ADMINISTRATION**

Implications for Prince Albert Local Municipality:

- The PASDF will be based on the above mentioned principles as an underlying foundation to all proposals, endeavours, programmes and actions.

[5] SOUTH AFRICA. 1996. Constitution of the Republic of South Africa. http://www.info.gov.za/documents/constitution/1996/index.htm. Date of access: 25 Feb 2013.
[6] SOUTH AFRICA. 2013. Spatial Planning and Land Use Management Act. Pretoria: Government Press.

2.1.2.3 National Development Plan

The National Development Plan: Vision for 2030 is to eliminate poverty and reduce inequality by 2030, to reduce the number of households living below R418 a month per person to 0%. Furthermore, it states that unemployment should fall from 27% in 2011 to 6% by 2030 by creating 11 million additional jobs.

The National Development Plan states that developing and upgrading capabilities to enable sustainable and inclusive development requires a new approach and a new mindset. It proposes the following:

- Creating jobs and livelihoods.
- Expanding infrastructure.
- Transitioning to a low-carbon economy.
- Transforming urban and rural spaces.
- Improving education and training.
- Providing quality health care.
- Building a capable state.
- Fighting corruption and enhancing accountability.
- Transforming society and uniting the nation.

Chapter 8 of the National Development Plan deals with transforming human settlements and proposes inter alia the following overarching principles for all spatial development:

  - a) Spatial justice: The historic policy of confining particular groups to limited space (ghettosiation and segregation) and the unfair allocation of public resources between areas must be reversed.
  - b) Spatial sustainability: Sustainability patterns of consumption and production should be supported, and ways of living promoted that do not damage the natural environment. Walkable neighbourhoods, for example, reduce the need to travel and limit greenhouse gas emissions.
  - c) Spatial resilience: Vulnerability to environmental degradation, resource scarcity and climatic shocks must be reduced. Ecological systems should be protected and replenished.
  - d) Spatial quality: The aesthetic and functional features of housing and the built environment need to be improved to create more liveable, vibrant and valued places.
  - e) Spatial efficiency: Productive activity and jobs should be supported, and burdens on business minimised. Efficient commuting patterns and circulation of goods and services should be encouraged, with regulatory procedures that do not impose unnecessary costs on development.

Implications for Prince Albert Local Municipality:

- The PASDF will be based on the above mentioned principles as an underlying foundation to all proposals, endeavours, programmes and actions. This will ensure that the goals of the SDF are always measurable in real terms that apply to the people of South Africa.

2.1.2.4 Municipal Systems Act (Act 32 of 2000) [7]

Chapter 5 provides for the preparation of IDP's:

- S26(e) lists an SDF as a core component of an IDP and requires that the SDF provides Basic Guidelines for a Municipal Land Use Management System
- S24(1) requires that Municipalities should align their planning with National and Provincial Planning, as well as those of affected Municipalities
- S27 requires a District Municipality to adopt a Framework for Integrated Development Planning that is binding to the Local and District Municipality.

This Framework should:

- identify relevant national and provincial legislation,
- identify matters that require alignment between local and district planning,
- specify principles to be applied,
- determine procedures for coordination and amendment of the framework

Implications for Prince Albert Local Municipality:

- The spatial projects listed in the IDP document will be aligned with the SDF document and spatially addressed.

2.1.2.5 Local Government: Municipal Planning and Performance Management Regulations (GN R796 of 2001) [8]

S2 (4) requires that an SDF should:

- give effect to the DFA Principles;
- set out objectives that reflect the desired spatial form of the Local Municipality;
- contain Strategies and Policies to achieve the objectives and which should:
- indicate desired patterns of land use;
- address the spatial reconstruction;
- provide strategic guidance regarding the location and nature of development;
- set out basic guidelines for a Land Use Management System in the Local Municipality;
- set out a Capital Investment Framework for the Local Municipality's Development Programmes;
- contain a strategic assessment of the environmental impact of the SDF;
- identify Programmes and projects for the development of land within the Local Municipality;
- be aligned with the Spatial Development Frameworks reflected in the Integrated Development Plans of neighbouring Municipalities; and
- provide a Plan of the desired spatial form of the Local Municipality, which should:
- indicate where public and private land development and infrastructure investment should take place;
- indicate desired or undesired utilisation of space in a particular area;
- delineate an urban edge;
- identify areas for strategic intervention; and
- indicate priority spending areas.

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[7] **SOUTH AFRICA. 2000. Municipal Systems Act (Act 32 of 2000). Pretoria: Government Press**
[8] **SOUTH AFRICA. 2001. Local Government: Municipal Planning Performance Management Regulations. Regulation 796 of 2001. Pretoria: Government Press.**

2.1.2.6 Subdivision of Agricultural Land Act 70 of 1970[9]

Application Regulations regarding the subdivision of agricultural land for development within a Local Municipality:

Subject to the provisions of section 2, a Surveyor-General shall only approve a General Plan or Diagram relating to a subdivision of agricultural land:

(d) any subdivision of any land in connection with which a surveyor has completed the relevant survey and has submitted the relevant sub-divisional diagram and survey records for examination and approval to the surveyor-general concerned prior to the commencement of this Act.‖

, and a Registrar of Deeds shall only register the vesting of an undivided share in agricultural land referred to in section 3 (b), or a part of any such share referred to in section 3 (c), or a lease referred to in section 3 (d) or, if applicable, a right referred to in section 3 (e) in respect of a portion of agricultural land, if the written consent of the Minister in terms of this Act has been submitted to him.

(b) no undivided share in agricultural land not already held by any person, shall vest in any person;

(c) no part of any undivided share in agricultural land shall vest in any person, if such part is not already held by any person;

(d) no lease in respect of a portion of agricultural land of which the period is 10 years or longer, or is the natural life of the lessee or any other person mentioned in the lease, or which is renewable from time to time at the will of the lessee, either by the continuation of the original lease or by entering into a new lease, indefinitely or for periods which together with the first period of the lease amount in all to not less than 10 years, shall be entered into;

(e) (i) no portion of agricultural land, whether surveyed or not, and whether there is any building thereon or not, shall be sold or advertised for sale, except for the purposes of a mine as defined in section 1 of the Mines and Works Act, 1956 (Act 27 of 1956); and

(ii) no right to such portion shall be sold or granted for a period of more than 10 years or for the natural life of any person or to the same person for periods aggregating more than 10 years, or advertised for sale or with a view to any such granting, except for the purposes of a mine as defined in section 1 of the Mines and Works Act, 1956;

[Para. (e) substituted by s. 2 of Act 12 of 1979 and by s. 2 (1) (a) of Act 33 of 1984.]

Implications for Prince Albert Local Municipality:

- Applications involving the subdivision of agricultural land for development within a Local Municipality will be subject to the provisions of Section 2 of the Act.

[9] **SOUTH AFRICA. 1970. Subdivision of Agricultural Land Act 70 of 1970. Pretoria: Government Press.**

2.1.2.7 National Environmental Management Act no.107 of 1998[10]

The SDF will promote clause (4) of the National Environmental Management Act (107 of 1998) and specifically the factors included in clause 4(a) Sustainable development.

Implications for Prince Albert Local Municipality:

- General land use management guidelines for rural areas to be included in the PASDF.
- The biodiversity plans will also highlight the sensitive land to be protected.

2.1.2.8 Breaking New Ground (BNG) (2004) [11]

The focus of this Policy is to change the delivery of housing at scale, to ensuring that housing delivery results in the creation of sustainable human settlements. The objectives of this Policy are:

- Accelerating the delivery of housing as a key strategy for poverty alleviation
- Utilising provision of housing as a major job creation strategy
- Ensuring property can be accessed by all as an asset for wealth creation and empowerment
- Leveraging growth in the economy
- Combating crime, promoting social cohesion and improving quality of life for the poor
- Supporting the functioning of the entire single residential property market to reduce duality within the sector by breaking the barriers between the first economy residential property boom and the second economy slump.
- Utilizing housing as an instrument for the development of sustainable human settlements, in support of spatial restructuring.

Implications for Prince Albert Local Municipality:

- The SDF map of each town will identify land for future development ensuring the delivery of homes, the development of human settlements and the integration of towns.

2.1.2.9 Outcomes

Twelve Outcomes had been identified by Government to be reached by 2014. These Outcomes have a set of measurable outputs to be achieved and each output has a set of activities to assist in achieving the output. The twelve key outcomes that have been identified and agreed to by Cabinet are:

1) Improved quality of basic education

The government has prioritised improving the quality of basic education. The country's school system is performing below its potential and improved basic education forms part of the country's long-term development goals.[12] The outputs that contribute to the achievement of Outcome 1 to improving the quality of basic education are as follows:

[10] SOUTH AFRICA. 1970. National Environmental Management Act 107 of 1998. Pretoria: Government Press.
[11] SOUTH AFRICA. 2004. Department of Human Settlements. Comprehensive housing plan for the development of integrated sustainable human settlements (Breaking new ground). Government Press: Pretoria. 23p.
[12] SOUTH AFRICA. The Presidency. http://www.thepresidency.gov.za/pebble.asp?relid=2457. Date of access: 11 February 2014.

- Output1: Improve the quality of teaching and learning
- Output 2: Undertake regular assessment to track progress
- Output 3: Improve early childhood development
- Output 4: Ensure a credible outcomes-focused planning and accountability system

2) A long and healthy life for all South Africans

Second to education, health is given particular importance by government. Within the health sector, improving the health status of the entire population is prioritised and this is believed to be possible by broadening community involvement in the provision of health at the local level.[13] The following outputs have been identified for the achievement of Outcome 2:

- Output 1: Increasing life expectancy
- Output 2: Decreasing maternal and child mortality rates
- Output 3: Combating HIV and AIDS and decreasing the burden of disease from Tuberculosis
- Output 4: Strengthening health system effectiveness

3) All people in South Africa are and feel safe

Crime is a central focus on South Africa's agendas and is identified as an impediment to the country's socio-economic development. In order for all people in the country to feel safe, the following outputs have been identified and need to be carried out:[14]

- Output 1: Address overall levels of crime and reduce the levels of contact and trio crimes
- Output 2: Improve effectiveness and ensure integration of the Criminal Justice System (CJS)
- Output 3: Combat corruption within the Justice, Crime Prevention and Security Cluster to
- enhance its effectiveness and its ability to serve as deterrent against crime
- Output 4: Manage perceptions of crime among the population
- Output 5: Ensure security at the border environment
- Output 6: Secure the identity and status of citizens
- Output 7: Integrate ICT systems and combat cyber crime
- Output 8: Corruption

4) Decent employment through inclusive economic growth

Outcome 4 aims to address South Africa's high level of unemployment contributing to poverty and unequal income distribution and aims to do so by promoting active investment and interventions by the state in order to catalyse inclusive growth on a large scale. The following outputs will be delivered through Outcome 4:

- Output 1: Faster and sustainable inclusive growth
  Output 2: More labour absorbing growth
- Output 3: Multi-pronged strategy to reduce youth unemployment
- Output 4: Increased competitiveness, to raise net exports, grow trade as a share of world trade and improve its composition
- Output 5: Improved cost structure in the economy
- Output 6: Improved support to small business and cooperatives
- Output 7: Implementation of the expanded public works programme

[13] SOUTH AFRICA. The Presidency. http://www.thepresidency.gov.za/pebble.asp?relid=2540. Date of access: 11 February 2014.
[14] SOUTH AFRICA. The Presidency. http://www.thepresidency.gov.za/pebble.asp?relid=4079. Date of access: 11 February 2014.

5) A skilled and capable workforce to support an inclusive growth path

No mechanism exists in South Africa that has information regarding the supply and demand for skills across the country.[15] The aim of outcome 5 is as is stated, to have a "skilled and capable workforce to support inclusive growth". Delivery agreements are set for each output which nominates agents responsible for the actions required for each output. Outcome 5 can be achieved through the following outputs:

- Output 1: Establish a credible institutional mechanism for skills planning
- Output 2: Increase access to programmes leading to intermediate and high level learning
- Output 3: Increase access to occupationally-directed programmes in needed areas and thereby
- expand the availability of intermediate level skills (with a special focus on artisan skills)
- Output 4: Increase access to high level occupationally-directed programmes in needed areas
- Output 5: Research, development and innovation in human capital for a growing knowledge
- Economy

6) An efficient, competitive and responsive economic infrastructure network

The infrastructure sector is faced with challenges that limit the potential of South Africa's economy and there has not been a great focus on the maintenance of infrastructure. Outcome 6 focuses on corrective measures required by government ensure infrastructure investment is maximising economic growth.[16] The following outputs have been identified for the achievement of Outcome 6:

- Output 1: Improving Competition and Regulation
- Output 2: Ensure reliable generation, distribution and transmission of electricity
- Output 3: To ensure the maintenance and strategic expansion of our road and rail network, and
  The operational efficiency, capacity and competitiveness of our sea ports.
- Output 4: Maintenance and supply availability of our bulk water infrastructure
- Output 5: Communication and Information technology
- Output 6: Develop a set of operational indicators for each segment

7) Vibrant, equitable and sustainable rural communities with food security for all

Outcome 7 aims to achieve "vibrant, equitable and sustainable rural communities". Service delivery is to be fast-tracked through this outcome to rural areas and to ensure that the quality of life, income and access to services in rural communities is increased.

The following outputs will be delivered through Outcome 7:

- Output 1: Sustainable agrarian reform with a thriving farming sector
- Output 2: Improved access to affordable and diverse food
- Output 3: Improved rural services to support livelihoods
- Output 4: Improved employment and skills development opportunities
- Output 5: Enabling institutional environment for sustainable and inclusive growth.

[15] SOUTH AFRICA. The Presidency. http://www.thepresidency.gov.za/MediaLib/Downloads/Home/Ministries/DepartmentofPerformanceMonitoringandEvaluation3/TheOutcomesApproach/Delivery%20Agreement%205%20Nov%202010.pdf. Date of access: 11 February 2014

[16] SOUTH AFRICA. The Presidency. http://www.thepresidency.gov.za/pebble.asp?relid=2460. Date of access: 11 February 2014

8) Sustainable human settlements and improved quality of household life

A delivery agreement has been developed for Outcome 8, which commits key partners to work together to deliver outputs. Outcome 8 aims to have, as stated above, "sustainable human settlements and improved quality of household life". To achieve this, each output for outcome 8 has key partners. The outputs are as follows:

- Output 1: Upgrading 400 000 units of accommodation within informal settlements (Delivery Agent - Between the Minister and provincial MEC's as per the IGR Act)
- Output 2: Improving access to basic services (Delivery Agent: Between Minister of Human Settlements and the Minister of Cooperative Governance)
- Output 3: Facilitate the provision of 600 000 accommodation units within the gap market for people earning between R3 500 and R12 800 (Delivery Agent: Between the Minister of Human Settlements and the Ministers of Public Works, Public Enterprises and Rural Development and Land Reform
- Output 4: Mobilisation of well-located public land for low income and affordable housing with increased densities on this land and in general (Delivery Agent: closely work with National Treasury)[17]

9) A responsive, accountable, effective and efficient local government system

To reach the vision of having a "responsive, accountable, effective and efficient local government system", it is believed that municipality's need to be made accountable and ordinary community involvement is required to make the change required in the local government.[18] To reach outcome 9, the following outputs have been set:

- Output 1: Implement a differentiated approach to municipal financing, planning and support
- Output 2: Improving access to basic services
- Output 3: Implementation of the Community Work Programme
- Output 4: Actions supportive of the human settlement outcome
- Output 5: Deepen democracy through a refined Ward Committee model
- Output 6: Administrative and financial capability
- Output 7: Single window of coordination

10) Environmental assets and natural resources that are well protected and continually enhanced

Outcome 10 has been set in order protect and enhance the country's natural assets, and falls in line with Section 24 of the Constitution which specifies that South Africans have the right to a healthy environment for present and future generations. The environment itself should be protected and ecologically degraded, and ecological sustainable development should be secured.[19] The following outputs have been identified for the achievement of Outcome 10:

- Output 1: Enhanced quality and quantity of water resources
- Output 2: Reduced greenhouse gas emissions, climate change impacts and improved air/atmospheric quality
- Output 3: Sustainable environmental management
- Output 4: Protected biodiversity

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[17] SOUTH AFRICA. The Presidency. http://www.thepresidency.gov.za/pebble.asp?relid=2542. Date of access: 11 February 2014

[18] SOUTH AFRICA. The Presidency. http://www.thepresidency.gov.za/pebble.asp?relid=2462. Date of access: 11 February 2014

[19] SOUTH AFRICA. The Presidency. http://www.thepresidency.gov.za/pebble.asp?relid=2463. Date of access: 25 Feb. 2013.

11) Create a better South Africa and contribute to a better and safer Africa and World

The government aims to achieve Outcome 11 by encouraging collective action by individual departments, the private sector, NGOs and civil society in relation to international strategies. The country wants to be making its presence known on the global stage, in order to promote economic growth.[20] Key departments are identified to achieve outcome 11 and they are the key actors for the following outputs:

- Output 1: Enhanced African agenda and sustainable development
- Output 2: Enhanced regional integration
- Output 3: Reformed global governance institutions
- Output 4: Enhanced trade and investment

12) An efficient, effective and development oriented public service and an empowered, fair and inclusive citizenship.[21]

The government aims to achieve "An efficient, effective and development oriented public service and an empowered, fair and inclusive citizenship". A delivery agreement has been set for outcome 12 and the outputs are as follows[i]:

- Output 1: Service delivery quality and access
- Output 2: Human resource management and development
- Output 3: Business processes, systems, decision rights and accountability management
- Output 4: Tackling corruption in the public service

Implications for Prince Albert Local Municipality:

- The Prince Albert SDF should aim to address the mentioned outcomes and there specific outputs.

2.1.2.10 National Waste Management Strategy[22]

The National Waste Management Strategy objectives will be considered:

- Address integrated waste management planning
- Waste minimisation; recycling
- Waste collection and transportation
- Waste treatment and disposal

Implications for Prince Albert Local Municipality:

- Prince Albert Local Municipality will be analysed in terms of the listed objectives of the National Waste management Strategy.

[20] SOUTH AFRICA. The Presidency. http://www.thepresidency.gov.za/pebble.asp?relid=4081. Date of access: 25 Feb. 2013.
[21] SOUTH AFRICA. The Presidency. http://www.thepresidency.gov.za/pebble.asp?relid=2464. Date of access: 25 Feb. 2013.
[22] SOUTH AFRICA. Department of Environmental Affairs. The national waste management strategy. http://www.wastepolicy.co.za/home/nwms_v1/title. Date of access: 25 Feb. 2013.

2.1.2.11 Neighbourhood Partnership Development Grant (NPDG) (2007) 23

The NDPG is aimed at stimulating and accelerating investment in poor, underserved residential neighbourhoods by providing technical assistance and capital grant financing for municipal projects. These projects should have a distinct private sector element or an intention to achieve this. Funding from this Programme takes the form of a conditional grant to Municipalities through the Division of Revenue Act (DoRA), 2007 and is administered by the Neighbourhood Development Programme (NDP) Unit of the National Treasury.

Implications for Prince Albert Local Municipality:

- The PASDF will indicate priority areas for investment and identify potential projects.

2.1.2.12 Green Paper on Land Reform, 2011[24]

In order to align land reform initiatives, the former Department of Land Affairs embarked on a series of District Area Based Plans to align land reform efforts with other initiatives including SDF's.

- A re-configured single, coherent four-tier system of land tenure, which ensures that all South Africans, particularly rural blacks, have a reasonable access to land with secure rights, in order to fulfil their basic needs for housing and productive livelihoods.
- Clearly defined property rights, sustained by a fair, equitable and accountable land administration system within an effective judicial and 'governance' system.
- Secure forms of long-term land tenure for resident non-citizens engaged in appropriate investments which enhance food sovereignty and livelihood security, and improved agro-industrial development.
- Effective land use planning and regulatory systems which promote optimal land utilization in all areas and sectors.

Implications for Prince Albert Local Municipality:

- The PASDF will identify opportunities for land reform where possible.

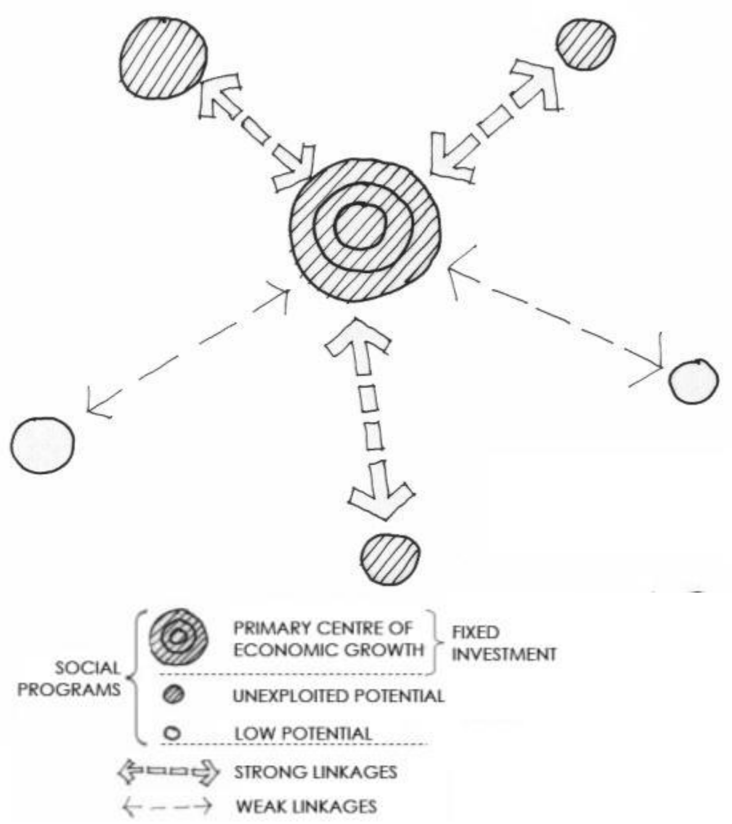
2.1.2.13 National Spatial Development Perspective (NSDP)

The National Spatial Development Perspective is a government policy that recognises the importance of the space economy in addressing the legacy of apartheid and poverty and provides principles for guiding the space economy as follows:

- All people have a right to basic services (wherever they reside)
- Fixed investment should be direct to areas with economic and employment growth potential
- Social inequalities should be addressed through investment in people rather than places
  - Future settlement and development opportunities should be channelled to nodes and corridors related to major growth centres, see **Figure 2** below.

[23] SOUTH AFRICA. 2006. Department: National Treasury. Neighbourhood Development Partnership Grant. http://ndp.treasury.gov.za/default.aspx. Date of access: 25 Feb. 2013.
[24] SOUTH AFRICA. 2011. Department: Rural Development and Land Reform. Green Paper on Land Reform. Government Press: Pretoria. 11 p.

Figure 2 | Principles of the NSDP Spatial Guidelines[25]



Implications for Prince Albert Local Municipality:

- Identify spatially distorted towns/settlement and identify measures to rectify the situation.
- Identify towns/settlements with low economic growth potential and these with high economic growth potential. Thereafter a decision can be made in terms of which towns/villages should receive human development programs and which could also receive fixed economic infrastructure investment in addition to human development programs.
- Identify the appropriate method for service delivery to the identified settlements with low economic growth potential.

2.1.2.14 National Biodiversity Framework (NBF)

The NBF was published in 2008 in terms of the National Environmental Management: Biodiversity Act (Act 10 of 2004). The NBF provides a Framework to co-ordinate and align the efforts of the many organizations and individuals involved in conserving and managing South Africa‘s biodiversity, in support of sustainable development. It also provides a framework for conservation and development, emphasizing that care should be taken over the location of development, the type of development, and the consumption of natural resources in the development process. Municipalities are identified as organs of state whose core business is not biodiversity conservation, but whose Policies, Programmes and decisions impact directly and substantially on how South Africa‘s biodiversity is managed. As

[25] SOUTH AFRICA. Department of Rural Development and Land Reform. 2011. Guidelines for the Formulation of Spatial Development Frameworks. Draft 8. Pretoria. Government Press. 41 p.

such, they play a key role in managing the natural resources, and are required to take biodiversity into account in their planning and decision-making.

The NBF requires Provincial Conservation Authorities to develop Provincial Spatial Biodiversity Plans, which form the basis for the development of Biodiversity Sector Plans and/or the publication of Bioregional Plans in terms of the Biodiversity Act.

Bioregional Plans are Spatial Plans that are published in terms of the Biodiversity Act. They consist of maps that identify Critical Biodiversity Areas (CBA's) and Ecological Support Areas (ESA's) accompanied by land-use guidelines for CBA's and ESA's. Bioregional Plans are aligned with administrative boundaries, usually district, local or metropolitan.

Implications for Prince Albert Local Municipality:

- The sensitive biodiversity areas need to be mapped and guidelines should be identified to guide their conservation.

2.1.2.15 National 2014 Vision[26]

As part of South Africa's celebration of 10 years of democracy in 2014, National Government formulated Vision 2014 to guide itself over the next 10 years.

- Reduce unemployment by half.
- Provide the skills required by the economy.
- Ensure that all South Africans are fully able to exercise their constitutional rights and enjoy the full dignity of freedom.
- Compassionate government service to the people.
- Massively reduce health risks.
- Significantly reduce the number of serious and priority crimes.
- Position South Africa strategically as an effective force in global relations.

Implications for Prince Albert Local Municipality:

- The PASDF should aim to address the mentioned vision of National Government.

[26] **SOUTH AFRICA. 2009. Vision 2014. Pretoria: Government Press**

2.1.2.16 National Development Plan: Vision for 2030[27]

The outcomes of the national development plan can be summarised as follows:

- An economy that will create more jobs
- Improving infrastructure
- Transition to a low-carbon economy
- An inclusive and integrated rural economy
- Reversing the spatial effects of apartheid
- Improving the quality of education, training and innovation
- Quality health care for all
- Social protection
- Building safer communities
- Reforming the public service
- Fighting corruption
- Transforming society and uniting the country

In SDF will unpack the specific role that Prince Albert Local Municipality will play in the roll out of the above mentioned outcomes.

Implications for Prince Albert Local Municipality:

- The PASDF should aim to address the mentioned outcomes.

2.1.3 Provincial Legislation, Policies, Programmes and Frameworks

2.1.3.1 Land Use Planning Bill (18 January 2013)[28]

The Land Use Planning Bill (soon to be Act) of the Western Cape together with the SPLUMA will be a key informant in terms of land development applications and land use management systems.

The principles contained in Chapter V, Section 62 are listed below:

- The principle of **SPATIAL JUSTICE**
- The principle of **SPATIAL SUSTAINABILITY**
- The principle of **EFFICIENCY**
- The principle of **FLEXIBILITY**
- The principle of **GOOD ADMINISTRATION**

Implications for Prince Albert Local Municipality:

- The PASDF will be based on the above mentioned principles as an underlying foundation to all proposals, endeavours, programmes and actions. This will ensure that the goals of the SDF are always measurable in real terms that apply to the people of South Africa.

[27] NATIONAL PLANNNING COMMISION. 2011. National Development Plan: Vision for 2030. Pretoria: Government Press. 134p.
[28] SOUTH AFRICA. 2013. Land Use Planning Bill. Western Cape Provincial Gazette

2.1.3.2 Provincial Strategic Plan

The 12 broad thematic areas of focus (Provincial Strategic Objectives) of the Provincial Government are:

- Creating opportunities for growth and jobs.
- Improving education outcomes.
- Increasing access to safe and efficient transport.
- Increasing wellness.
- Increasing safety.
- Developing integrated and sustainable human settlements.
- Mainstreaming sustainability and optimising resource use efficiency.
- Increasing social cohesion.
- Reducing poverty.
- Integrating service delivery for maximum impact.
- Creating opportunities for growth and development in rural areas.
- Building the best-run regional government in the world.

The above mentioned areas have specific strategic objectives, a plan to achieve outcomes and targets attached to each.

Implications for Prince Albert Local Municipality:

- The provincial strategic objectives and their specific outcomes will be taken into account when analysing the status quo conditions of the municipality.

2.1.3.3 Provincial Spatial Development Framework - Western Cape

The purpose of the Provincial SDF of the Western Cape is to:

- Be the **spatial expression** of the Provincial Growth and Development Strategy (PGDS)
- **Guide** (metropolitan, district and local) municipal integrated development plans (IDPs) and spatial development frameworks (SDFs) and provincial and municipal framework plans (i.e. sub-SDF spatial plans)
- Help **prioritise and align** investment and infrastructure plans of other provincial departments, as well as national departments' and parastatals' plans and programmes in the Province.
- Provide clear signals to the private sector about **desired development directions**.
- Increase **predictability in the development environment**, for example by establishing "no-go", "conditional" and "go" areas for development and redress the spatial legacy of apartheid.

The Western Cape PSDF identified the following issues for the Central Karoo and specifically Prince Albert:

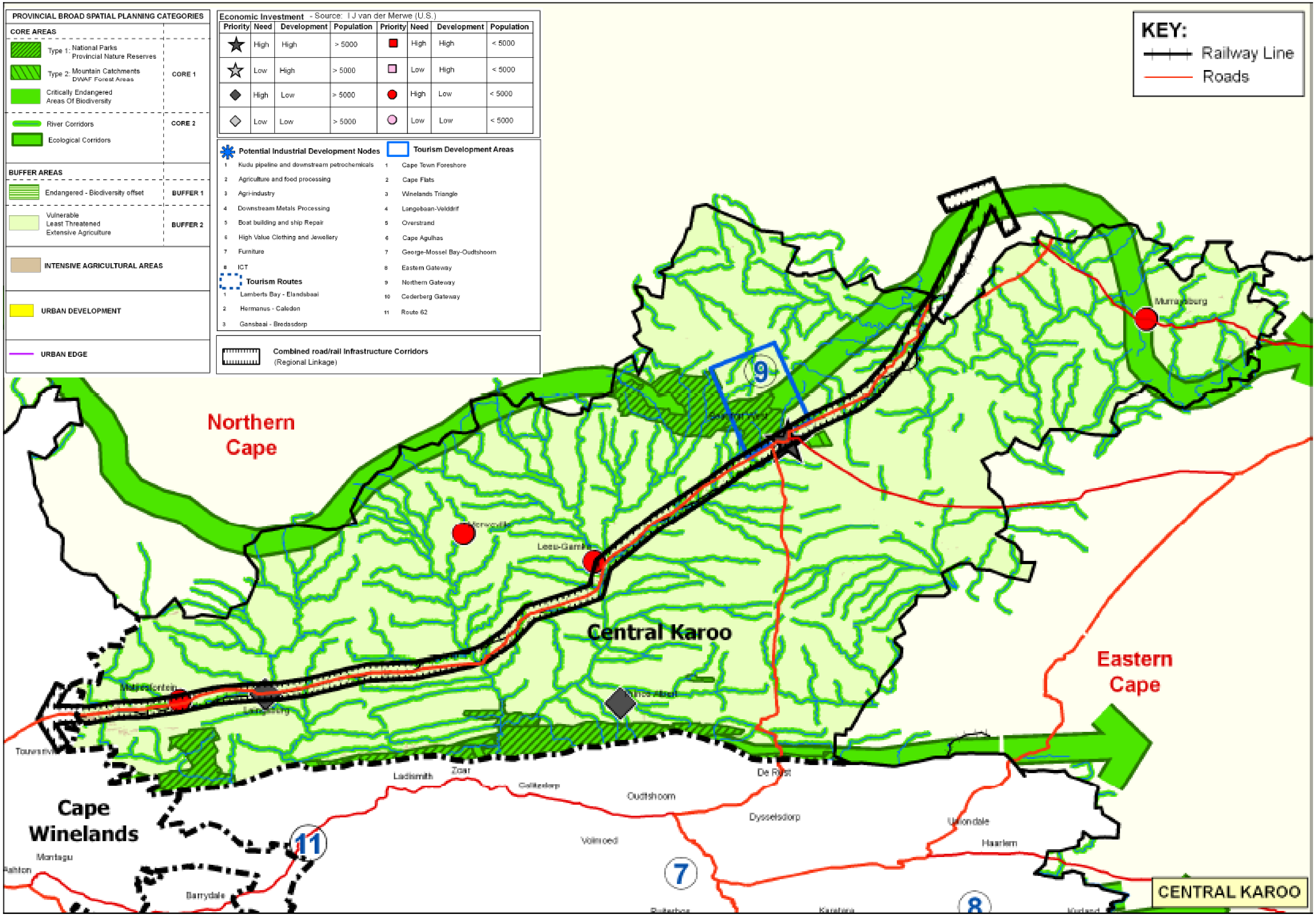
- Arid area of depopulation;
- high percentages of human development problems although relatively few people;
- veld management, biodiversity conservation and stock carrying capacity problems;
- need for inclusionary policy in places like Prince Albert; and,
- desertification from the westward movement of the Karoo.

The following strategies were identified to address the before mentioned issues:

- Reinforce development potential and urban efficiencies of towns with economic growth potential like Beaufort West, Prince Albert and Laingsburg.
- Support the work of SANBI and the Department of Agriculture's Soil Conservation Committees to achieve synergy with veld management programs that will improve both biodiversity conservation and stock carrying capacity.

The objectives identified in the WCPSDF are:

- **Socio-Economic Development**
  - **Objective 1:** Align the future settlement pattern of the Province with areas of economic potential and the location of environmental resources.
  - **Objective 2:** Deliver human development programs and basic needs programs wherever they are required.
  - **Objective 3:** Strategically invest scarce public resources where they will generate the highest socio-economic returns.
  - **Objective 4:** Support Land Reform.
  - **Objective 5:** Conserve and strengthen the sense of place of important natural, cultural and productive landscapes, artefacts and buildings.
- **Urban Restructuring**
  - **Objective 6:** End the apartheid structure of urban settlements.
  - **Objective 7:** Conveniently locate urban activities and promote public and non-motorised transport.
- **Environmental Sustainability**
  - **Objective 8:** Protect biodiversity and agricultural resources.
  - **Objective 9:** Minimise the consumption of scarce environmental resources, particularly water, fuel, building materials, mineral resources, electricity and land – in the latter case especially pristine and other rural land, which is the Province's 'goldmine-above-the-ground'.



Map 1 | PSDF: Central Karoo (Source: WCSDF)

The WC PSDF map above indicates the Broad Spatial Planning Categories, derived from the provincial approach to bioregional planning. The five Broad Spatial Planning Categories provides policies for development and activities in the following areas:

- Core areas
- Buffer areas
- Intensive agriculture areas
- Urban development areas and,
- The Urban Edge

Implications for Prince Albert Local Municipality:

- The PASDF will vertically align with the WC PSDF.
- The development priority of Prince Albert Local Municipality is:
  1) Prince Albert
  2) Leeu Gamka
- The combined road and rail transport corridor is indicated along the railway that passes through Prince Albert Road and Leeu Gamka.
- An ecological corridor is located along towards the south of the municipality.

2.1.3.4 Western Cape Provincial SDF Rural Land Use Planning & Management Guidelines[29]

The Western Cape's unique rural areas are facing escalating development pressures, the provincial government has taken the initiative to provide guidance to its social partners on land use planning and management outside the urban edge (i.e. in rural areas). Forming part of the roll-out of the Provincial Spatial Development Framework (PSDF), their objectives in introducing rural land use planning and management guidelines are:

- To promote sustainable development in appropriate rural locations throughout the Western Cape, and ensure that the poor share in the growth of the rural economy.
- To safeguard the functionality of the province's life supporting ecosystem services (i.e. environmental goods and services).
- To maintain the integrity, authenticity and accessibility of the Western Cape's significant farming, ecological, cultural and scenic rural landscapes, and natural resources.
- To assist Western Cape municipalities to plan and manage their rural areas more effectively.
- To provide clarity to the provincial government's social partners on what kind of development is appropriate beyond the urban edge, suitable locations where it could take place, and the desirable form and scale of such development.

Implications for Prince Albert Local Municipality:

- The PASDF should guide the management of rural land use change in terms of holiday accommodation, on-farm settlements, residential, tourists and recreational facilities.

[29] **SOUTH AFRICA. 2009. Western Cape SDF Rural Land Use Planning & Management. Cape Town: Government Press.**

2.1.3.5 A revision of the 2004 Growth Potential of Towns in the Western Cape (2010)[30]

The functional classification of settlements, according to the Revised 2004 Growth Potential of Towns:

- Prince Albert - Agricultural service centre/Tourism
- Leeu Gamka – Residential

The development potential is classified as follows:

- Prince Albert - Low Development Potential
- Leeu Gamka - Low Development Potential

The social needs of the settlements are classified as follows:

- Prince Albert - High needs
- Leeu Gamka - Very high needs

Implications for Prince Albert Local Municipality:

- The PASDF should focus on developing the towns with the highest development potential while addressing the social needs in areas where it is most critical.

2.1.3.6 Growth Potential of towns in the Western Cape - Qualitative Phase: Unlocking latent potential and recommendations for appropriate interventions for regional development (2012)[31]

This report identified the following ideas to unlock the Prince Albert's hidden potential, assets and strengths on a regional level:

- Swartberg Pass and tourism route
  - The Swartberg Pass is in urgent need of repair and restoration. The potential of the pass could be developed if it were linked in a circular route covering the Seweweekspoort Pass and crossing the Gamtoos Dam on a pontoon or ferry and back to Prince Albert. Using the mountain pass for sport activities such as Comrades Marathon-styled events should also be explored.
- Spare water storage capacity for development
- Israeli agricultural practices
  - There is a potential growth opportunity in the establishment of an Israeli-styled agriculture settlement; it would be self-sufficient, create jobs and provide food security. This is a water-saving agriculture concept for the maximum use of water resources in an arid region.
- Agro-processing and industry
  - The apricots with no export value could be utilized in jam production or processed by the dried fruit industry.

[30] DEPARTMENT OF ENVIRONMENTAL AFFAIRS AND DEVELOPMENT PLANNING. 2010. A revision of the 2004 Growth Potential of Towns in the Western Cape Study. p. 55-57
[31] DEPARTMENT OF ENVIRONMENTAL AFFAIRS AND DEVELOPMENT PLANNING. 2012. Growth Potential of Towns in the Western Cape. Qualitative Phase: Unlocking latent potential and recommendations for appropriate interventions for regional development. p. 69-72

- Mining the Karoo?
  - Fracking, currently a swear word, is definitely a major economic growth potential for the region as a whole, but scientists warn that the ecological and environmental effects will be devastating to scarce resources such as water.
- Integrated marketing effort: Tourism on the next level – from Route to Destination

The marketing of the region should not be confined to tourism, but ideally place the product and people of the region on a higher level, in order for the region to compete for more investment.

Implications for Prince Albert Local Municipality:

The PASDF should focus on the hidden potential, assets and strengths as summarized above to stimulate the development of Prince Albert Local Municipality.

2.1.4 District Legislation, Policies, Programmes and Frameworks

2.1.4.1 Central Karoo 3rd Generation IDP 2012 - 2017

The CKDM IDP 2012-2017 aim to create a platform to inform decision making; create an environment for robust economic development; building social cohesion and ensuring that the vision of working together in development and growth is realised. The following strategic objectives are highlighted:

- To improve and maintain our roads and promote effective and save transport for all
- To deliver sound administrative and financial services, to ensure good governance and viability
- To effectively plan to minimise the impact of disasters on the community, visitors, infrastructure and environment
- To promote a safe, healthy environment and social viability of residents through the delivery of a responsible environmental health service.
- To establish an inclusive tourism industry through sustainable development and marketing which is public sector led, private sector driven and community based.
- To ensure a united integrated development path in a safe and sustainable environment.
- To pursue economic growth opportunities that will create descent work.
- To facilitate effective stakeholder participation.

Implications for Prince Albert Local Municipality:

- The PASDF should guide the management of rural land use change in terms of holiday accommodation, on-farm settlements, residential, tourists and recreational facilities.

2.1.4.2 Draft Central Karoo District Municipality Spatial Development Framework (July 2013)

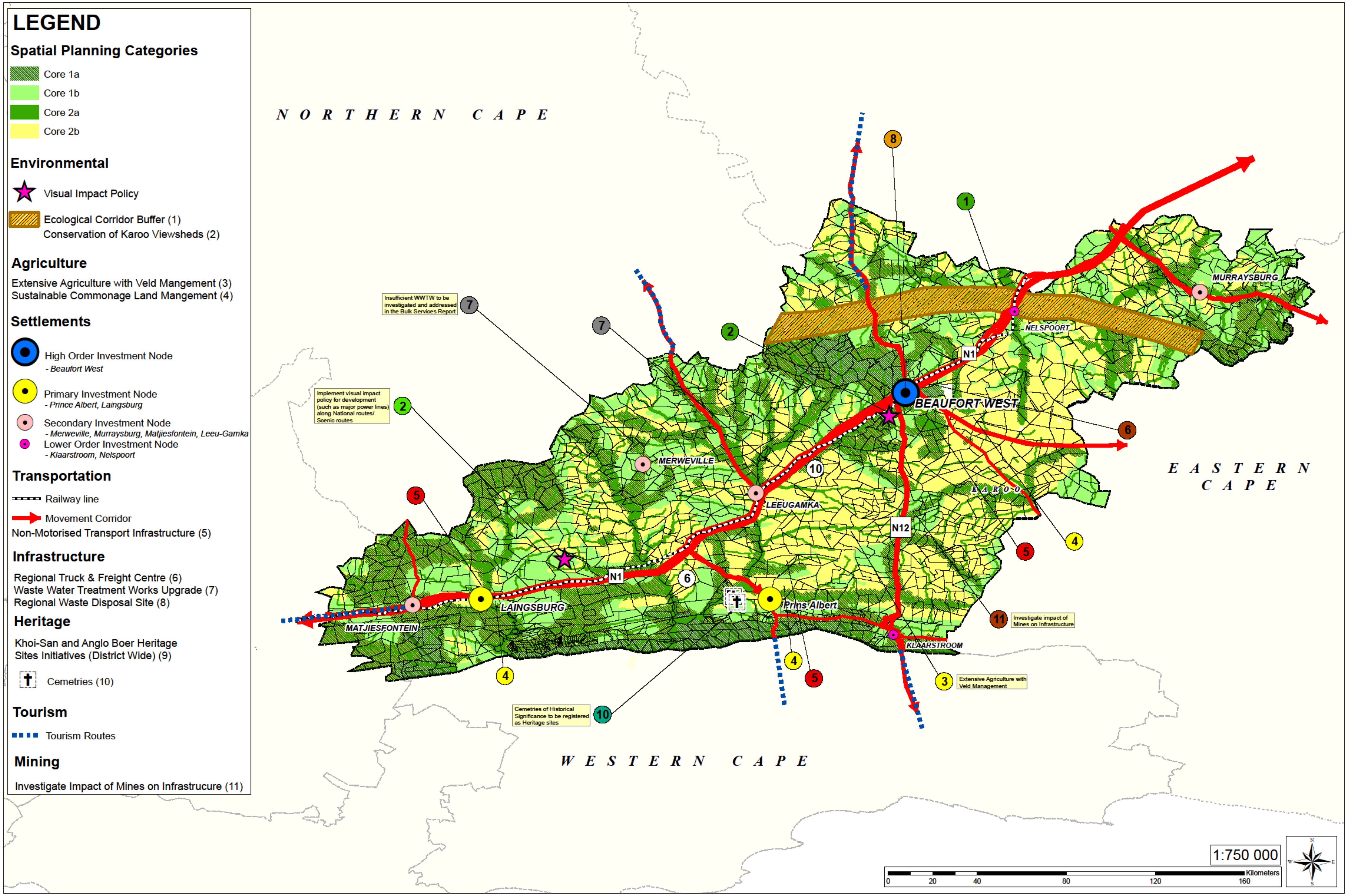
The Central Karoo District SDF states that the future spatial vision for the region is based on the mission provided for in the District Integrated Development Plan. **Map 2** below depicts the SDF of the district.

The spatial framework planning for the district is structured as follows:

- Rural areas including:
  - Areas used for agricultural purposes such as natural grazing.
  - Natural areas, some national parks, nature reserves, critical biodiversity areas and mountains.
- High order investment node: Beaufort West;
- Secondary investment node: Prince Albert, Laingsburg;
- Primary investment node: Merweville, Murraysburg, Maitjiesfontein, Leeu Gamka;
- Lower order investment node: Klaarstroom, Nelspoort.

Implications for Prince Albert Local Municipality:

- The following proposals, applicable to Prince Albert Local Municipality, are identified in the CKDM SDF: (See **Map 2** below for the specific locality of proposals within Prince Albert Local Municipality.)
  - Extensive agriculture with veld management;
  - Crop production subject to water availability;
  - No to limited development in Fynbos Biome Region;
  - The cemeteries of historical significance to be registered as heritage sites; and
  - Investigate the impact of mines on infrastructure.



AECOM

CENTRAL KAROO DISTRICT MUNICIPALITY - SPATIAL DEVELOPMENT FRAMEWORK

PLAN 20
NOVEMBER 2013

Map 2 | Central Karoo District SDF (Source: Aecom, 2013)

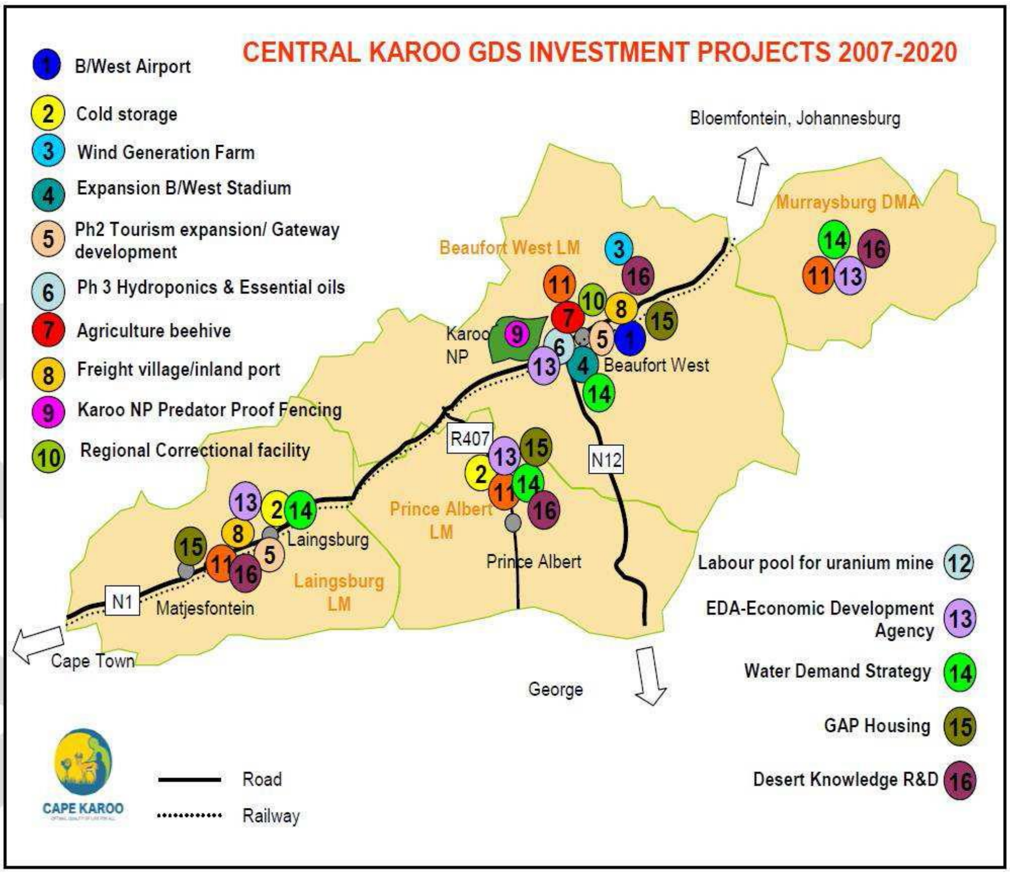
2.1.4.3 Central Karoo Growth & Development Strategy (GDS) 2007 – 2022

To facilitate effective stakeholder participation The GDS Strategy was conducted in 2007 after the summit on the 9th of March 2007. It reflected sixteen major catalytic projects as the outcomes for economic growth in the region. These have been spatially mapped in order to align with the SDF reviews during that time, see **Figure 3** below.

One of the biggest criticisms against this document was that the GDS did not receive the necessary attention due to lack of a driver within the municipality itself for the past 4 years. It is envisaged that the appointment of the LED Manager could assist greatly, since there is little assistance and direction from the Premier's Offices as the provincial driver of the strategy.

The following map shows the GDS investment projects for the period 2007 – 2022.

Figure 3 | Central Karoo GDS 2007 - 2022: Investment Projects



Implications for Prince Albert Local Municipality:

- The Central Karoo GDS 2007 – 2022 offers guidance with regard to developmental issues in Prince Albert Local Municipality.

2.1.4.4 Biodiversity Assessment of the Central Karoo District Municipality (2009)[32]

In an attempt to fill this gap in biodiversity planning the Department of Environmental Affairs and Development Planning (DEADP) in conjunction with the Central Karoo District Municipality (CKDM) commissioned this district-wide biodiversity assessment to inform Spatial Development Frameworks (SDFs), Biodiversity Sector plans, Environmental Management Frameworks (EMFs), Strategic Environmental Assessments (SEAs) and the Environmental Impact Assessment (EIA) process. This biodiversity assessment, through the development of a critical biodiversity area (CBA) map for the district, is aimed at assisting biodiversity and land use managers and decision makers in this demanding task. This report summarizes the results of the biodiversity assessment conducted.

Implications for Prince Albert Local Municipality:

- The critical biodiversity area map will be used to analyse the bio-physical environment of Prince Albert Local Municipality.

2.1.5 Local Legislation, Policies, Programmes and Frameworks

2.1.5.1 Prince Albert Local Municipality IDP (2012 – 2017)[33]

The IDP identified the most persistent socio–economic difficulties facing the Prince Albert Local Municipality, these issues includes: economic growth and job creation, education, public transport, community health, crime reduction, improved personal safety, social cohesion and alleviation of poverty.

Quarterly Ward Committee meetings were advertised through media and loudhailers in certain areas to enhance participation by the broader communities. **Table 1** shows the main development needs that were identified during these meetings:

Table 1 | Development Needs

Ward	Development needs	
Ward 1	• Housing development • Maintenance on tarred roads • Water Quality • Upgrading of the sports facility	• Storm water upgrade • New street lightning • Skills Development • Job creation
Ward 2	• Housing development, GAP Housing • Maintenance on tarred roads & Potholes • Water Quality & Storage Capacity & Borehole Registrations • Registration of boreholes • Swartberg Pass Rehabilitation • River Health • Upgrading of farm/ dirt roads • Storm water upgrade • New street lightning & Upgrade	• Electricity blackouts • Skills Development • Job creation • Fracking • Public Toilets in the CBD • Parks & Recreation • CPF Victim Support Room • Clearing of alien vegetation • Street Signage • Child parenting (Street Kids)
Ward 3	• Housing development • Maintenance on tarred roads • Water Quality	• Storm water upgrade • New street lightning • Skills Development

[32] DEADP. 2009. Biodiversity Assessment of the Central Karoo District Municipality. 5 p.
[33] PRINCE ALBERT LOCAL MUNICIPALITY. 2012. Prince Albert Local Municipality IDP (2012 – 2017). 74-79 p.

Ward	Development needs	
	• Upgrading of the sports facility • Driver's License test court	• Job creation
Ward 4	• Housing Development • Maintenance on tarred roads and speed bumps • Construction of new roads at Rondomskrik • Eradication of bucket systems on farms • Water Provision & Reticulation • Disaster Management • Upgrading of the sports facility e.g. irrigation systems.	• Storm water upgrade • Health care facility (Clinic) • Tourism Development • New street lightning • Skills Development • Job creation • Personnel at the Landfill site in Klaarstroom • Maintenance on the crèche • Support to emerging farmers e.g. Water, Infrastructure etc.

The principles of "Batho Pele" are adopted by Prince Albert Local Municipality as a value system and can be summarised as follows:

- **Consultation:** Citizens should be consulted about service levels and the quality of services to be rendered;
- **Standard of services:** Citizens must be made aware of what to expect in terms of the level and quality of services that will be rendered;
- **Accessibility:** All citizens should have equal access to the services that they are entitled to;
- **Courtesy:** All citizens should be treated with courtesy and consideration;
- **Information:** Citizens must receive full and accurate information about the services that will be rendered;
- **Transparency:** Citizens should be informed about government departments' operations, budgets and management structures;
- **Redressing:** Citizens are entitled to an apology, an explanation and remedial action if the promised standard of service is not delivered;
- **Value for money:** Public services should be provided economically and effectively;
- **Co-operative governance:** As a partner in governance we will promote and constructively participate in regional, provincial and national programmes; and
- **Capacity building** for all involved in the municipality.

Furthermore the following development objectives are discussed in the IDP in more detail and will be taken into consideration in the preparation of the SDF:

- Sustained Improvement of the status of the Municipal area and the eradication of the spatial legacy
- To improve the general standards of living
- To provide quality, affordable and sustainable services on an equitable basis
- To stimulate, strengthen and improve the economy for sustainable growth
- To maintain financial viability & sustainability through prudent expenditure, and sound financial systems
- To commit to continues improvement of human skills and resources to delivery effective services.
- To enhance participatory democracy.

Implications for Prince Albert Local Municipality:

- The objectives and development needs highlighted in the IDP document should be incorporated and addressed in the PASDF were possible.

2.1.5.2 Prince Albert Spatial Development Framework, March 2009

The PASDF 2009 has the following goals:

- Recognise the functionality and dynamics of towns within the municipality.
- Encourage the intensification and diversify certain land uses (tourism, agri- and eco tourism).
- Identify opportunities and problems and solve these in a sustainable manner.
- Promote integration.
- Thoroughly consider the principles of bioregional planning.

Furthermore the PASDF 2009 provides spatial development strategies for the municipal area as a whole and for Prince Albert, Leeu Gamka and Klaarstroom.

Implications for Prince Albert Local Municipality:

- The study did not include Prince Albert Road and will therefore be included in the updated SDF.
- The status quo and baseline information will be updated in the amended SDF.
- No overall spatial proposals map was prepared for Prince Albert Local Municipality, this map will therefore be included in the updated SDF.

2.1.5.3 Other Local Legislation, Policies, Programmes and Frameworks

The following local legislation, policies, programmes and frameworks are applicable to Prince Albert Local Municipality:

- Prince Albert Local Municipality Valuation Roll, 2013
- Prince Albert Local Municipality Audit: Commonage Grounds, 2009
- Prince Albert Groundwater Management and Artificial Recharge Feasibility Study, 2007
- Prince Albert Spatial Development Framework and Protection of Heritage (1993 – 2013)
- Prince Albert Heritage Inventory, (2009 – 2011)
- Prince Albert Conservation Strategy
- Prince Albert WSDP 2009/10
- Housing Pipeline, 2013
- Bulk Water and Sanitation Master plan, 2010
- Prince Albert Service Delivery Enhancement Plan, 2011
- Prince Albert Air Management Plan
- Prince Albert Local Municipality Local Integrated Transport Plan (2009 – 2013)
- Prince Albert Local Economic Development Strategy Document, 2013
- Prince Albert Integrated Waste Management Plan, 2005
- Prince Albert Housing Development – Investigation on identified sites in Prince Albert, 2012

Implications for Prince Albert Local Municipality:

- The listed documents above were used as data sources in order to analyse the status quo conditions of Prince Albert Local Municipality.

2.1.6 Neighbouring planning

Prince Albert Local Municipality has 5 neighbouring municipalities, namely Beaufort West, Laingsburg, Kannaland, Oudtshoorn and Baviaans Local Municipality.

2.1.6.1 Laingsburg Spatial Development Framework, 2011

The Laingsburg Spatial Development Framework was prepared in December 2011 and proposed the following objectives for the municipality:

- Integrate and break down sharp sense of difference between town and township.
- Increase thresholds for the support of business and community facilities in the township and town.
- Improve attractiveness of settlements, Laingsburg town and Matjiesfontein to attract people in the category LSM 7 – 10 to reside there, thereby increasing local demand, employment creation and therefore, the size of the local economy.
- Ensure all urban residents have appropriate access to municipal services.
- Sustain long term carrying capacity and the land and water.
- Ensure adequate infrastructure support for economy increase access to economic activities for historically disadvantage individuals; and
- Promote urban and rural linkages via the local economy.

The western boundary of Prince Albert Local Municipality abuts Laingsburg Local Municipality as shown on **Map 3** below.

Implications for Prince Albert Local Municipality:

- The Laingsburg SDF identified a cross border ecological corridor which includes the Swartberg Mountain Rage. The corridor is situated towards the southern western side of Prince Albert Local Municipality as can be seen on **Map 3.**

2.1.6.2 Baviaans Spatial Development Framework, 2007

The SDF is based on the following spatial planning objectives:

- Mutually supportive and integrated land development in the rural and urban areas:
- Providing residential and employment opportunities in close proximity to one another;
- Maintaining the balance between existing and scarce resources;
- Creating compact and integrated towns where historically distorted patterns have been eradicated;
- Providing for various land tenure option;
- Promoting sustainable development; and,
- Providing access to residents for social, recreational and institutional services.

The western boundary of Prince Albert Local Municipality abuts Laingsburg Local Municipality as shown on **Map 3** below.

Implications for Prince Albert Local Municipality:

- In 2007 when the Baviaans SDF was compiled the area abutting Prince Albert Local Municipality was part of the District Management Area, therefor no spatial proposals were formulated for this area at the time.

2.1.6.3 Draft Beaufort West Spatial Development Framework, May 2013

The Kannaland SDF identified the following spatial vision:

"Wilderness tourism and transport gateway to the people, mountains and plains of the Central Karoo"

The implications of this vision are as follows:

- Beaufort West town has a responsibility to present itself as a welcoming and convenient centre for catering for the needs of through travellers as well as to attract visitors to spend time in the sub-region;
- An important aspect of improving the presentation of the town is constructing the proposed bypass to remove heavy truck traffic from the main street;
- Promoting urban tourism opportunities in the municipality's settlements;
- Promoting good veld management to improve the carrying capacity of extensive agricultural land.
- Intensive engagement with shale gas exploration open cast uranium mining proponents to protect the long term interests of the municipality and its residents:

The northern boundary of Prince Albert Local Municipality abuts Beaufort West Local Municipality as shown on **Map 3** below.

Implications for Prince Albert Local Municipality:

- Good veld management and intensive engagement with shale gas exploration open cast uranium mining proponents are cross border issues with should be address in the PASDF.

2.1.6.4 Kannaland Spatial Development Framework, May 2013

The Kannaland SDF identified the following spatial vision:

"Wilderness Tourism and Intensive Agriculture Heartland of the Klein Karoo"

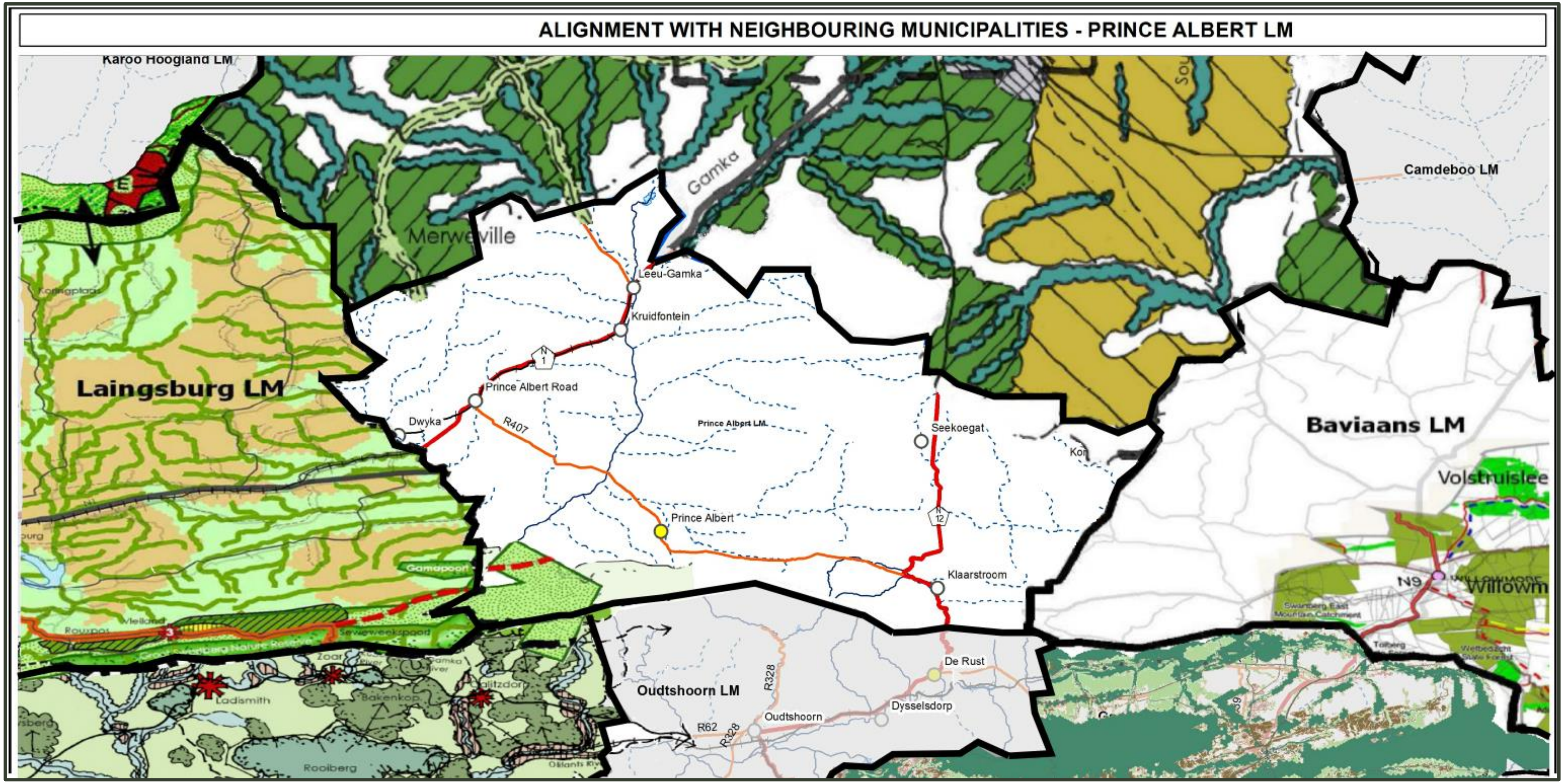
The implications of this vision are as follows:

- Continue to promote more private and public nature reserves and their wilderness tourism offerings;
- Extend the tourism offerings to include cultural and heritage tourism attractions in the main centres with a focus on Zoar, Amalienstein and Vanwyksdorp;
- Protect intensive agriculture as the most important economic and employment resource and as a key input into the agri-industrial (manufacturing) sector;
- Conduct human resource development courses in these sectors so that local employment and entrepreneurial opportunities are increased;
- As part of promoting agriculture and bio-diversity conservation ensure that river health is maintained after water courses leave their pristine upper catchments currently protected in formal nature reserves or mountain catchment areas;
- Improve the attractiveness of the urban centres to retirees and permanent residents through urban maintenance and management programs.

The south western boundary of Prince Albert Local Municipality abuts Kannaland Local Municipality as shown on **Map 3** below.

Implications for Prince Albert Local Municipality:

- The health of rivers is a cross border issue with should be addressed in the PASDF.



Map 3 | Alignment with the Neighbouring Municipalities

2.2 Locational Context

2.2.1 National and Provincial Locality[34]

As can be seen on **Map 4** below, the Prince Albert Local Municipality is located in the Western Cape Province approximately 390 kilometres north-east of Cape Town. The Western Cape is approximately 129 462 square kilometres, the country's fourth-largest province, taking up 10.6% of South Africa's land area and with a population of 5.8 million people. It borders the Eastern Cape and the Northern Cape Province, the cold Atlantic and warm Indian Ocean. The province is known for its diverse landscapes of majestic mountains, patchworks of farmland set in valleys, long beaches and the wide-open landscape of the semi-desert Karoo.

Visitors to the Western Cape can disembark at the Cape Town international airport, the George airport or at the ports of Cape Town, Mossel Bay or Saldanha. Other towns include Worcester and Stellenbosch in the heart of the winelands, George, a centre for indigenous timber and vegetable production, Oudtshoorn, known for its ostrich products and the world-famous Cango caves, and Beaufort West on the dry, sheep-farming plains of the Great Karoo.

The Western Cape economy contributes roughly 14% to South Africa's GDP. More sophisticated sectors such as finance, real estate, ICT, retail and tourism have shown substantial growth, and are the main contributors to the regional economy. The value of residential property has increased significantly.

[34] SOUTH AFRICA INFO. 2012. Western Cape Province, South Africa. http://www.southafrica.info/about/geography/western-cape.htm#ixzz2RCZ27Bjk. Date of access: 22 April 2013

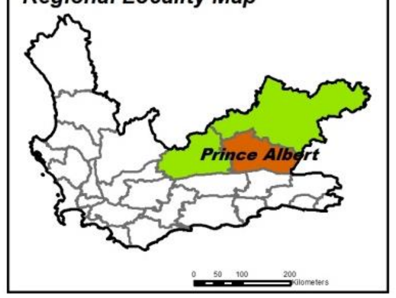
NATIONAL CONTEXT - PRINCE ALBERT LM



LEGEND

- Main Places
- Main Roads
- Railway
- Prince Albert LM
- Central Karoo DM
- Provincial boundary

Regional Locality Map



Prince Albert Local Municipality

Data Sources: Demarcation Board, NGI, PGWC, MapIT & BGIS (SANBI)

July 2013

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Map 4 | National and Provincial Context

2.2.2 Regional Context

The Central Karoo District, a semi-desert area, is one of the five districts situated within the Western Cape Province. With a population of 56 232 the Central Karoo is the most sparsely populated district in the Province. Geographically the Central Karoo is the largest district in the Western Cape Province; thus the distances between settlements within the district are vast. Laingsburg is about 200 km from Beaufort West, while Prince Albert is ±130 km.

The total area of the Central Karoo District Municipality (CKDM) is 38 853 km², covering approximately 30% of the total area of the Western Cape. The district comprises of three Local Municipalities:

- Beaufort West Municipality
- Prince Albert Local Municipality
- Laingsburg Municipality[35]

The Central Karoo's GRP (+/- R670 million) contributes less than 1% to the economy of the Western Cape (+/- R125 billion) although it is one of the larger areas in the region. Agriculture, Tourism, Transport and Trade are the main contributors to the economy.[36]

The following Local Municipalities share a border with the Prince Albert Local Municipality: (see **Map 5** below)

- Laingsburg Local Municipality (Western Cape)
- Beaufort West Local Municipality (Western Cape)
- Kannaland Local Municipality (Western Cape)
- Oudtshoorn Local Municipality (Western Cape)
- Baviaans Local Municipality (Eastern Cape)

In terms of the regional context and interaction with surrounding municipalities and regions across the various bio-regions, the Prince Albert Local Municipality is located on the eastern fringes of the Western Cape/Eastern Cape Provincial Border.

N1 and N12

The N1 and N12 national routes pass through Prince Albert Local Municipality, see **Map 5** below. The N1 connects Johannesburg with Cape Town and the N12 connects Witbank (from the N4) in Mpumalanga with George via Johannesburg. High traffic volumes flow from the Gauteng regions via these two national roads to coastal holiday destinations during the public holiday periods. The traffic volume from the N12 and N1 converge on the N1 just North of Beaufort West.

LAINGSBURG LOCAL MUNICIPALITY

The main centre in the Laingsburg Local Municipality is Laingsburg, situated on the N1 to the West of the Prince Albert Local Municipality, which is approximately 130 km from Prince Albert.

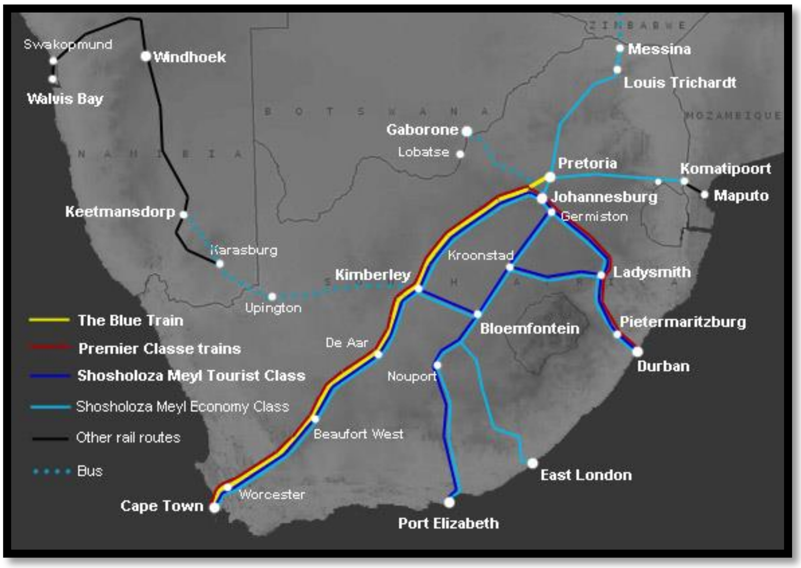
BEAUFORT WEST LOCAL MUNICIPALITY

Beaufort West is the main centre in the Beaufort West Local Municipality and the N1 and N12 routes connects just before Beaufort Wes. The majority of the train routes passes through Beaufort West, see **Figure 4** below. Beaufort West is situated approximately 130 km from Prince Albert.

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[35] **SOUTH AFRICA. 2012. Central Karoo District Municipality 3rd Generation IDP, 2012-2017. p.26**
[36] **SOUTH AFRICA. 2010. Central Karoo District Nodal Vision 2010. p.4**

Figure 4 | Passenger Train Routes in South Africa[37]



KANNALAND LOCAL MUNICIPALITY

Kannaland Local Municipality is situated on the south western side of Prince Albert Local Municipality. The main centre in the Kannaland Local Municipality is Ladismith, situated on the R62 approximately 135 km from Prince Albert.

OUDTSHOORN LOCAL MUNICIPALITY

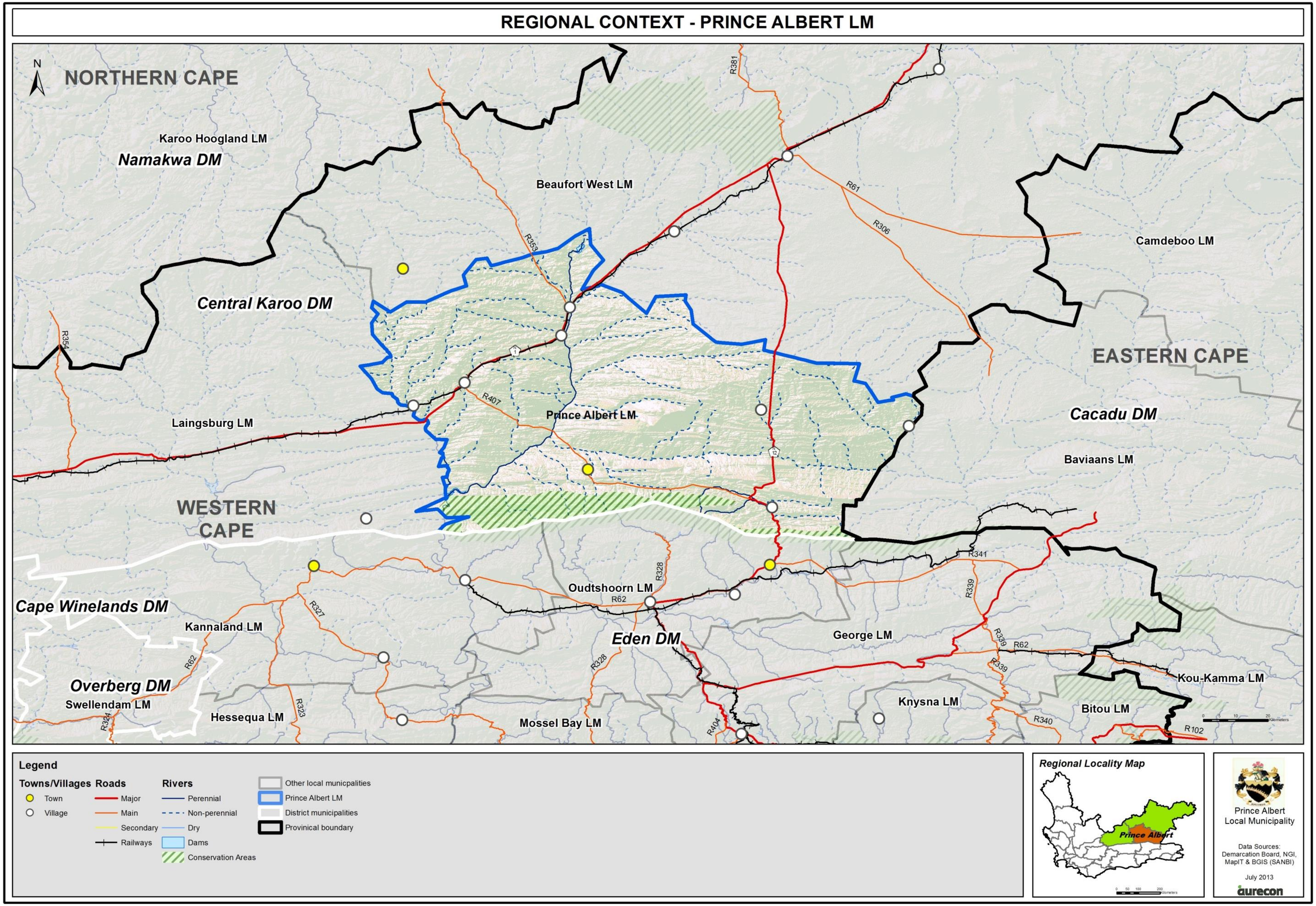
The Greater Oudtshoorn area is nestled at the foot of the northern side of the Swartberg mountains. Oudtshoorn is the main service centre of the municipality and is connected to Prince Albert via the R328. It is a 71 km drive from Oudtshoorn to Prince Albert.

BAVIAANS LOCAL MUNICIPALITY

Willowmore is the main town of Baviaans Local Municipality, approximately 150km from Prince Albert. Baviaans Local Municipality is situated on the eastern side of Prince Albert Local Municipality.

[37]SHOSHOLOZA MEYL. 2012. http://www.southafrica.to/transport/Train/Shosholoza-Meyl/Shosholoza-Meyl.php5. Date of access: 25 March 2013

REGIONAL CONTEXT - PRINCE ALBERT LM



Map 5 | Regional Context

2.2.3 Local Locality

Prince Albert Local Municipality (WC052) is located within the Central Karoo District Municipality (DC5), to the southern side thereof.

The towns/settlement of Prince Albert Local Municipality can be categorized as follows:

- Main local town/Tourism hub: Prince Albert (see **Figure 5** below)
- Local town/Agricultural service centre: Leeu Gamka (see **Figure 6** below)
- Rural Settlements: Klaarstroom (see **Figure 7** below), Prince Albert Road (see **Figure 8** below), Kruidfontein, Dwyka, Kommandokraal and Seekoeigat

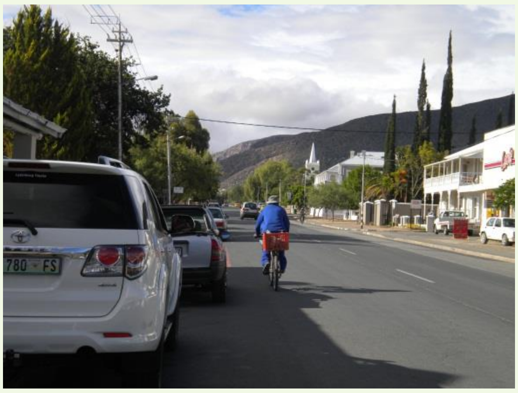


Figure 5 | Church Street, Prince Albert



Figure 6 | Station building, Leeu Gamka



Figure 7 | Entrance to Klaarstroom



Figure 8 | Prince Albert Road

As can be viewed in **Map 6** below, the municipal area consists out of 4 wards, namely:

- Ward 1: Leeu Gamka & Prince Albert Road
- Ward 2: Prince Albert North
- Ward 3: Prince Albert South
- Ward 4: Prince Albert North-end (Rondomskrik) & Klaarstroom

The N1 runs on a northeast-south-westerly axis of Prince Albert Local Municipality through Leeu Gamka and Prince Albert Road. The N12 runs on a north-south axis through Klaarstroom and connects to Oudtshoorn, George, the Southern Cape region and the N2.

Additionally Leeu-Gamka and Prince Albert Road can be accessed via national railway. Prince Albert however can only be accessed via the R407 (46 km from the N1) or the R353 (40 km from the N1). The secondary roads provide access to the rural areas within the municipal area; these roads are mostly gravel roads.

Prince Albert Municipal area contributed 30.9% to the GDP of the District the area is mainly known for its architecture, agriculture and tourism Industry. [38]

Prince Albert lies at the foot of the Swartberg Mountains in the Great Karoo, with the Cango Caves and Schoemanspoort to the south-east on the way towards Oudtshoorn. The Swartberg Pass and the Cango caves can be viewed in **Figure 9 and 10** below.



Figure 9 | The Swartberg Pass



Figure 10 | Cango Caves

As can be viewed in **Figure 11 to 14** below, Prince Albert has beautiful historical buildings and a unique linkage between the agricultural environment and the urban environment, which attracts a lot of tourists. Thus the protection and management of the natural environment and heritage is of utmost importance and tourism is an important sector to be expanded.

This well-established tourism sector includes attractions such as:

- Astro Tours,
- Ghost Walks,
- Hiking,
- Gay's Dairy/Cheese Tours,
- The Prince Albert Olives & Olive Tree Nursery,
- The Soet Karoo Wine Estate,
- Prince Albert Annual Olive festival,
- The Swartberg Pass, etc.

[38] SOUTH AFRICA. 2012. Prince Albert 3rd Generation IDP, 2012-2017. p.41



Figure 11 | Urban/Agricultural linkage



Figure 12 | Swartberg Hotel



Figure 13 | Current municipal Initiatives



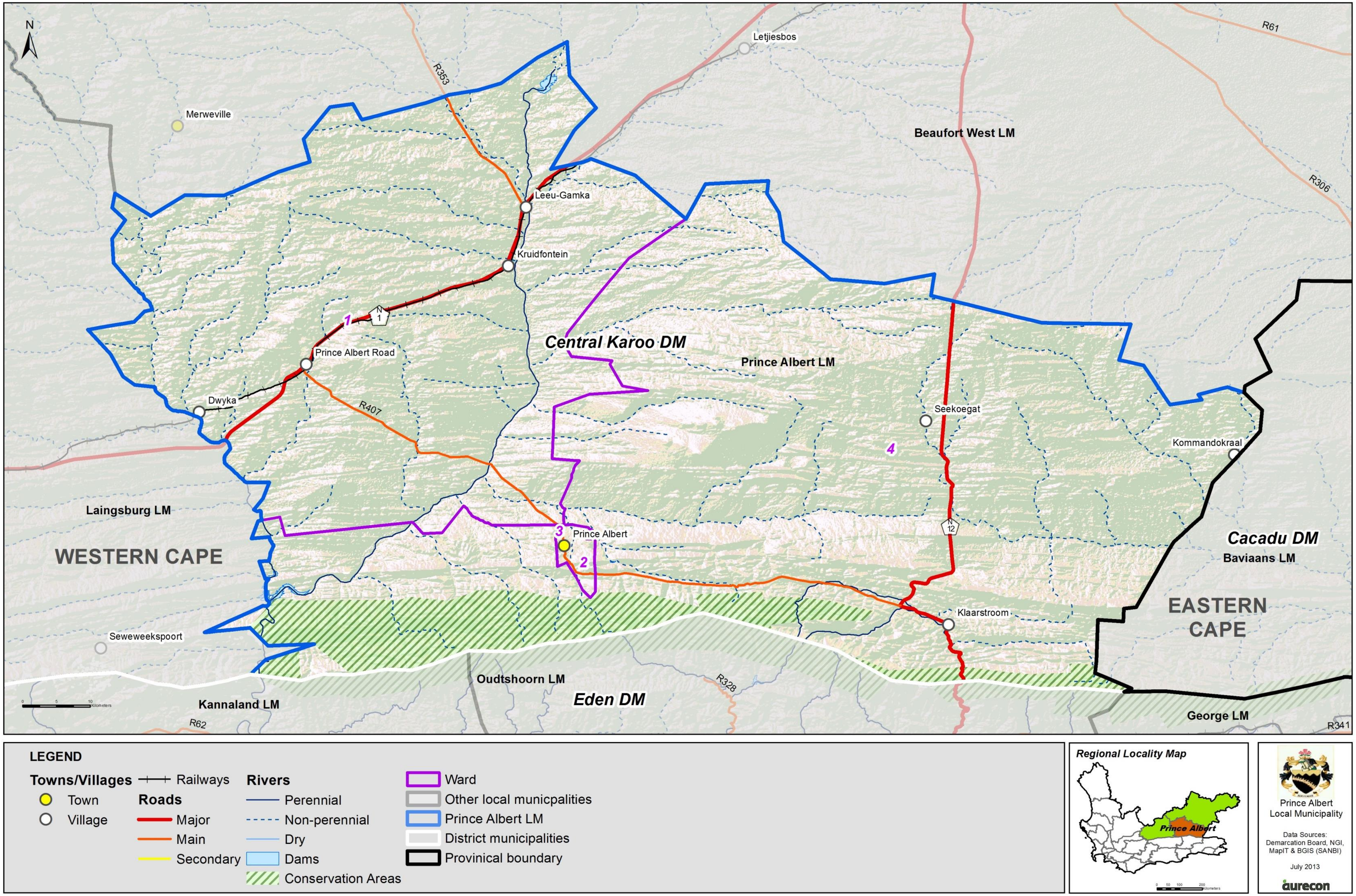
Figure 14 | 250 years of history and historical buildings

The main farming activities in this area are deciduous fruit for the export market, olives, vineyards, vegetable seed production, lucerne and ostrich. Agriculture utilises environmental resources and proper management of land is of important value and will be addressed in the SDF. Opportunities for potential growth will be sought and the following promising areas will be investigated:

- Tourism
- Agriculture and agro-processing
- Manufacturing
- Wholesale and retail

A holistic approach to the delicate relationships between the above-mentioned sectors will be taken in the SDF and proposals made for strategies and projects.

LOCAL CONTEXT - PRINCE ALBERT LM



Map 6 | Local Context

3 General objectives, strategies and outcome of the SDF

3.1 Objectives

The general objectives of the SDF can be summarised as follows:

- To provide a Spatial Development Vision and Strategy.
- To ensure optimal use of public funds (scarce resources), with the minimal wastage so that the most can be made from a limited municipal budget.
- To act as a coordination tool for the Local Municipality's Development Plans.
- To promote the most optimal and efficient use of land within the municipality.
- To act as a decision making tool for the private sector. To provide a clear vision of the Municipality to commercial stakeholders and developers. In this manner, the SDF informs the Land Use Management System.

BIOREGIONAL PLANNING

Biodiversity considerations should be reflected into all land use considerations at all levels of Government especially at local level. In this regard it is of utmost importance that spatial biodiversity priority areas are incorporated into all strategic spatial development frameworks and policies. This intervention will minimize the impact of urban development and industrial development (and the resultant loss of habitat) on biodiversity. Local government is required, in terms of NEMBA to align IDPs with the National Biodiversity Framework to take ecosystems and threatened species into account. Local authorities also need to pay particular attention to control and eradication of invasive alien species and to waste management and pollution. Spatial plans at local level should be informed by national and provincial priorities and should guide development in the way that minimizes the impact on biodiversity.

The Bioregional Planning Concept is an all-encompassing Strategy to include all facets of human life on earth and ensuring sustainability thereof for future generations. The Concept was developed in Environmental Conservation Schools of thought and is expanded to include all planning, which will inadvertently affect biodiversity, economic efficiency and human well-being or social aspects.

The three sectors need to complement each other to form a sustainable and habitable environment where all human needs are accommodated. The Bioregional Planning Concept pertains to a specific geographic area where the three mentioned sectors interact on a Regional Plan. These delicate relationships take place within boundaries and need to be recognised. The Bioregional space may not be contained with administrative boundaries as municipal boundaries, but it does form the true reality that exists and needs to be identified and supported. In terms of the PASDF specifically, the CBA's as set out in the Biodiversity Assessment of the Central Karoo District Municipality and more recent CBA maps of the Central Karoo DM and the Prince Albert. Local Municipality will be used as a base layer to inform the Core, Buffer and Transition SPC's, as set out in the Western Cape Bio-regional Planning Manual.

3.2 Strategies

The aforementioned objectives with each objective's strategy are summarised in **Table 2**. The strategies provide the actual methods that needs to be implemented to ensure that the objectives be met on ground level.

Table 2 | Development Objectives

Development Objective	Strategy
The integration of various areas in the Municipality to form a well-functioning space economy.	• Channel development into a System of nodes and corridors, in accordance with the Principles of the National Spatial Development Perspective. • Do not promote or support developments that are out of context with the desired development directions. • Development must be localised in specific strategic areas where there can be a focused effort on the provision of engineering services, transportation and land use integration. • Consolidate existing areas rather than creating new development areas. • Programming of interventions and phasing of development focus in a coherent and spatially defensible manner. • Identify a well-argued rational urban edge to prevent urban sprawl. • Ensure that sector plans are aligned with the SDF and the direction provided by it.
The development of sustainable human settlements and renewal of existing settlements.	• Move away from the current pattern of housing delivery towards an approach of integrated, inclusive, sustainable settlement creation and promote the creation of mixed-use settlements in which economic opportunities and adequate facilities are provided for. • Employ the principles of Breaking New Ground in all new settlements, as well as in the upgrading and renewal of existing settlements. • Identify land for housing projects in close proximity to core areas, and with the emphasis on improved linkages. • The strategic objective 6 of the Department of Human Settlement's will be utilized as the overall guiding policy for the achievement of this objective.
The promotion and facilitation of economic development.	• Support and develop strategic locations that contain the right characteristics to enable sustainable economic development and which contribute to the overall spatial efficiency and sustainability.

Development Objective	Strategy
	• To maintain and enhance the sense of place and historic character of Prince Albert to attract and maintain tourists.
The sustainable management of the natural environmental assets and heritage.	• Identify and isolate the valuable natural assets, and exclude these from development proposals. • Ensure that a continuous ecological and open space system is created. • Ensure the conservation and sustainable management of conservation areas. • Identify a well-argued rational urban edge to protect the natural environment and heritage • Identify the CBA's and translate the areas into the SPC's as defined in the PSDF.
The promotion of tourism development.	• Identify tourism development opportunities within the Municipality • Ensure linkages to tourism development areas. • Recognise the important role the private sector and land owners play in tourism development. • To maintain and enhance the sense of place and historic character of Prince Albert to attract and maintain tourists. • Promote and undertake key strategic initiatives that enhance the tourism appeal and potential of Prince Albert.
The promotion of sustainable rural development.	• Identify and protect high potential agricultural land. • Support Land Reform. • Support the Comprehensive Rural Development Programme. • Identify the need for facilities and/or services and the ideal location for these. • Identify clear guidelines with regards to housing for farm workers.
The development and improvement of linkages with surrounding areas of importance.	• Develop and maintain a movement network that supports the spatial development focus areas and economic development. • Create a Strategic Network of movement linkages in the Municipality, and between major regional centres.

Development Objective	Strategy
	• Ensure land use and transportation integration.
Service delivery, specifically focusing on providing sufficient capacity in development priority areas.	• Ensure the provision of service infrastructure in accordance with spatial requirements (i.e. the integration of Spatial Planning and Engineering Services Master Planning). • Identify the strategic areas of opportunity that should be the focus areas for capital investment in engineering services infrastructure. • Exploration/testing of off-grid technologies to minimise the strain on municipal infrastructure and to enhance the sustainability of the settlements.

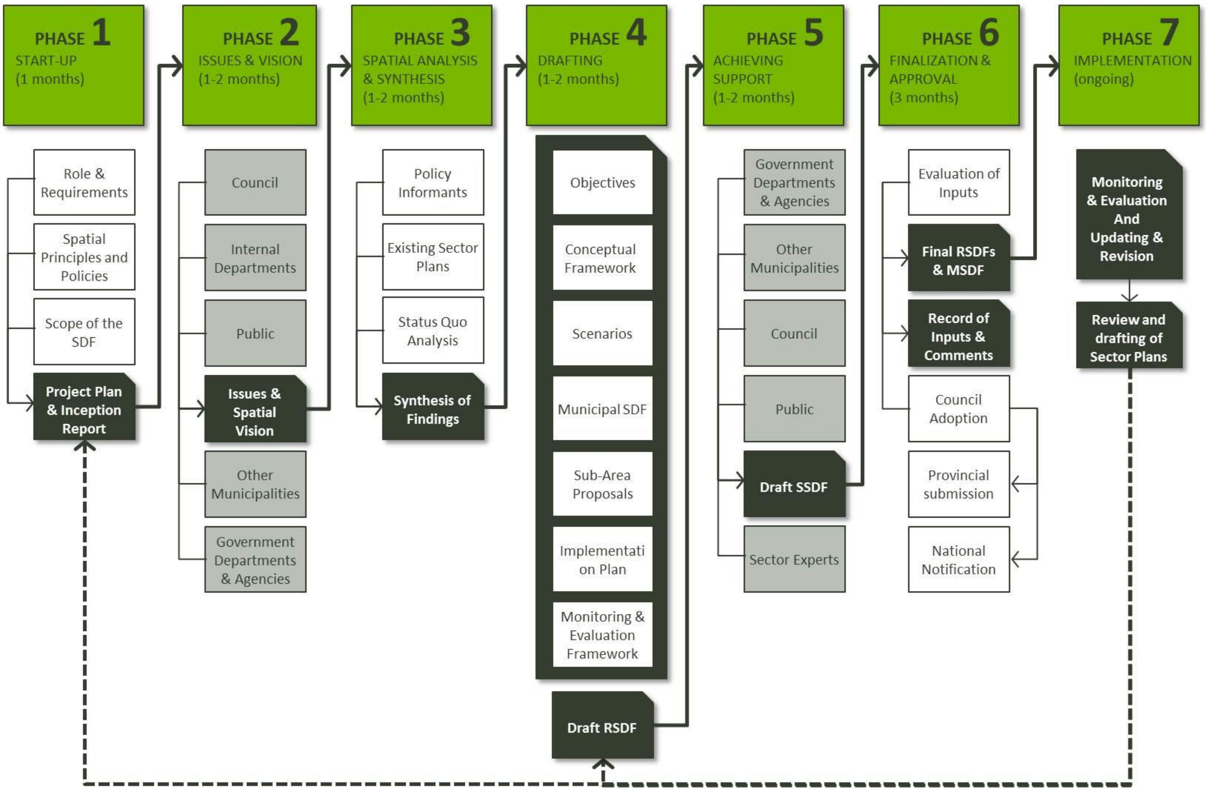
3.3 Outcomes

In the light of the recently enacted **Spatial Planning and Land Use Management Act, 2013 (Act No. 16 of 2013)**, the PASDF will be prepared to be correctly aligned with Section 12 of Chapter 4 which deals with the expected outcomes of a SDF.[39] Furthermore the SDF will also be aligned to the **Western Cape Land Use Planning Bill, 2012** also nearing completion. Chapter VI of the Bill sets out the principles that land use planning should adhere to.

[39] SOUTH AFRICA. 2013. Spatial Planning and Land Use Management Act. Pretoria: Government Press.

4 Methodology

Figure 15 | The SDF Methodology



The methodology used for the compilation of this SDF derived from the guidelines as compiled by the Department of Rural Development and Land Reform. The distinct phases are shown in **Figure 15** above and described below:

4.1 Phase 1: Start-up

During the Start-up Phase, the Steering Committee were established to guide the process on all levels. The purpose of this phase was to clarify the scope of work, policy context, spatial principles and role of the surrounding SDF's.

Outcomes of Phase 1:

- Project Steering Committee established
- Project Plan

4.2 Phase 2: Issues and Vision

The public participation process was executed during the Issues and Vision Phase. During the process, the community and stakeholders expressed all and any issues experienced that need to be addressed in their opinion. The Spatial Vision for the municipal area was formed and a sense of place was established.

Outcomes of Phase 2:

- Stakeholders involved in the identification of the issues to be addressed in the SDF.
- A SDF vision compiled.

4.3 Phase 3: Spatial Analysis and Synthesis

A desktop study was conducted to determine the status quo of Prince Albert Local Municipality in terms of the built environment, the socio-economic environment and the bio-physical environment. The findings were then synthesised as a whole for the Local Municipality to be taken further to the proposal stage.

Outcomes of Phase 3:

- Status Quo Analysis
- Synthesis of the spatial issues and opportunities and linkages between the different spatial aspects.

4.4 Phase 4: Drafting of the SDF

The Spatial Proposals are made during this phase based upon the information gathered during the first three phases. The structuring elements, proposals, spatial policies and strategies and land use management guidelines are compiled during this stage.

Outcomes of Phase 4:

- Draft Prince Albert Local Municipality SDF

4.5 Phase 5: Stakeholder support for approval

During this phase, the draft SDF was circulated for support to the various stakeholders, communities, council, government bodies, traditional leaders, etc. Community participation meetings were held to discuss the SDF with the mentioned parties.

Outcomes of Phase 4:

- Public Participation Report

4.6 Phase 6: Finalisation and Approval

The Finalisation and Approval phase is used to compile all comments from the previous phase and amendments are made to the draft SDF for submission for final approval. Final approval is to be executed in terms of all applicable legislation.

Outcomes of Phase 4:

- Final Prince Albert Local Municipality SDF
- A0 SDF map
- Executive Summary of SDF

4.7 Phase 7: Implementation

The SDF becomes operational at the Prince Albert Local Municipality during the Implementation phase, whereby planning and development will be guided by the finally adopted SDF. Constant monitoring is required to ensure the optimum usage of the SDF.

5 Vision, Mission & Principles

5.1 Underlying principles adopted for Prince Albert Local Municipality

The SDF will be based on a set of normative principles as an underlying foundation to all proposals, endeavours, programmes and actions. These principles will also ensure that the goals of the SDF are always measurable in real terms that apply to the people of South Africa.

The Spatial Planning and Land Use Management Act, 2013 (SPLUMA) is a framework act for all spatial planning and land use management legislation. It seeks to promote consistency and uniformity in procedures and decision-making in this field.

The following principles had been summarised from the Spatial Planning and Land Use Management Act (2013):

THE PRINCIPLE OF SPATIAL JUSTICE, WHEREBY:

- past spatial and other development imbalances are redressed through improved access to and use of land;
- Spatial Development Frameworks and Policies at all spheres of Government must address the inclusion of persons and areas that were previously excluded, with an emphasis on informal settlements, former homeland areas and areas characterised by widespread poverty and deprivation;
- Spatial Planning Mechanisms, including Land Use Schemes, must incorporate provisions that enable redress in access to land by disadvantaged communities and persons;
- Land Use Management systems must include all areas of a municipality and specifically include provisions that are flexible and appropriate for the management of disadvantaged areas, informal settlements and former homeland areas;
- Land Development Procedures will include provisions that accommodate access to secure tenure and the incremental upgrading of informal areas; and
- A Municipal Planning Tribunal considering an application before it, may not be impeded or restricted in the exercise of its discretion on the ground that the value of land or property is affected by the outcome of the application;

THE PRINCIPLE OF SPATIAL SUSTAINABILITY, WHEREBY SPATIAL PLANNING AND LAND USE MANAGEMENT SYSTEMS MUST:

- promote land development that is within the fiscal, institutional and administrative means of the Republic;
- ensure that special consideration is given to the protection of prime and unique agricultural land;
- uphold consistency of land use measures in accordance with environmental management instruments;
- promote and stimulate the effective and equitable functioning of land markets;
- consider all current and future costs to all parties for the provision of infrastructure and social services in land developments;
- promote land development in locations that are sustainable and limit urban sprawl; and
- result in communities that are viable.

THE PRINCIPLE OF EFFICIENCY WHEREBY:

- land development optimises the use of existing resources and infrastructure;
- decision-making procedures are designed to minimising negative financial, social, economic or environmental impacts; and
- development application procedures are efficient and streamlined and time frames are adhered to by all parties;

THE PRINCIPLE OF SPATIAL RESILIENCE WHEREBY:

- flexibility in Spatial Plans, Policies and Land Use Management Systems is accommodated to ensure sustainable livelihoods in communities most likely to suffer the impacts of economic and environmental shocks.

THE PRINCIPLE OF GOOD ADMINISTRATION WHEREBY:

- all Spheres of Government ensure an integrated approach to land use and land development that is guided by the Spatial Planning and Land Use Management Systems as embodied in this Act;
- all government departments must provide their sector inputs and comply with any other prescribed requirements during the preparation or amendment of spatial development frameworks
- the requirements of any Law relating to land development and land use are met timeously;
- the preparation and amendment of spatial plans, policies, land use schemes as well as procedures for development applications, include transparent processes of public participation that afford all parties the opportunity to provide inputs on matters affecting them; and
- Policies, Legislation and Procedures must be clearly set in order to inform and empower members of the public.

5.2 Spatial Vision and Mission

5.2.1 Existing vision and mission statements

The Vision and Mission Statements of the Western Cape Provincial Strategic Plan, the Western Cape Provincial SDF, the CKDM IDP and the Prince Albert Local Municipality IDP will be used as a basis to formulate the local SDF's Vision and Mission Statements. The before mentioned is summarized below:

5.2.1.1 Western Cape Provincial Strategic Plan

Mission (Provincial Strategic Objectives):

- Creating opportunities for growth and jobs.
- Improving education outcomes.
- Increasing access to safe and efficient transport.
- Increasing wellness.
- Increasing safety.
- Developing integrated and sustainable human settlements.
- Mainstreaming sustainability and optimising resource use efficiency.
- Increasing social cohesion.
- Reducing poverty.
- Integrating service delivery for maximum impact.
- Creating opportunities for growth and development in rural areas.
- Building the best-run regional government in the world.

5.2.1.2 Western Cape Provincial Spatial Development Framework[40]

Vision:

"Socially just communities and settlements in the Western Cape."

5.2.1.3 Central Karoo IDP Vision and Mission Statement[41]

Vision:

"Working Together in Development and Growth"

Mission:

"Central Karoo place a high priority upon ensuring that future growth improves the quality of life in the region. It is the desire to be financial sustainable, maintain the rural character and create healthy communities by facilitating economic growth, improving infrastructure and the green energy opportunities, providing and supporting alternative modes of delivery (shared services), improve marketing, branding and communication with all stakeholders, provide excellent disaster and risk management services, and maintaining housing choices for a range of income levels."

5.2.1.4 Prince Albert IDP Vision and Mission Statements[42]

Vision:

"*Prince Albert, an area characterised by high quality of living and service delivery."*

Mission:

"To create an enabling environment to achieve our vision, in the delivering of quality and sustainable services, to our community."

5.2.2 Prince Albert Local Municipality - Spatial Vision and Mission

A Spatial Vision and Mission Statement for the SDF will be compiled from inputs provided during the public participation process and the broader visions and missions of the province and district. Please refer to Appendix A for a brief summary of the Prince Albert Local Municipality SDF public participation process and the outcomes thereof. Furthermore the Vision and Mission statements of the SDF are subject to the framework provided by the underlying normative principles. The main principles are:

- Spatial Justice
- Spatial sustainability
- Efficiency
- Good administration

[40] SOUTH AFRICA. 2009. Western Cape Provincial Spatial Development Framework. 3-1p.
[41] CENTRAL KAROO DISTRICT MUNICIPALITY. 2012. Central Karoo 3rd Generation Integrated Development Framework, 2012-2017. 75p.
[42] PRINCE ALBERT LOCAL MUNICIPALITY. 2012. Prince Albert 3rd Generation Integrated Development Framework, 2012-2017. 65p.

The Spatial Development Framework 20 Year Vision:
To provide:

"Sustainable development opportunities and service delivery, whilst optimally and responsibly utilising natural resources and protecting the unique rural characteristics of the area."

The Spatial Mission Statements needs to be aligned within the Principle Framework mentioned above, to be measurable. Therefore the Municipal Mission Statement is:

Mission Statement:
To provide:

- *The preservation and enhancement of our heritage*
- *Sustainable measures and opportunities to protect and develop tourism and business activities.*
- *Municipal infrastructure to provide a platform for economic development*
- *Sustainable and responsible conservation of natural resources*

5.3 Sense of Place

During the community meetings held, a sense of place for the Local Municipality was discussed with individuals living in the towns/settlements, the leaders of the community and representatives of community organisations. It was explained that the sense of place would include elements unique to the area and which would encapsulate the heart of the Local Municipality.

A sense of place is what makes a place unique. A "place" comes into existence when humans give meaning to a previously undifferentiated space. It is often made up of a mix of the natural environment, cultural features and the people who occupy that place.

The sense of place that was defined by the community contains the following elements:

- The dominant geographic feature of the Local Municipality is the Swartberg pass.
- The Local Municipality is largely covered by commercial farming practices and a small number of towns/settlements.
- The vastness of the area and the wide open spaces where people live in close harmony and in a delicate balance with nature which exemplifies the lifestyles of its people. An atmosphere of tranquillity and calmness in rhythm with the slower pace of life is experienced in these areas.
- Prince Albert an agriculture town with a lot of economic potential.
- Prince Albert can be described as a "Sagte" Karoo Town of historical significance.
- Leeu Gamka and Prince Albert Road can be described as typical railway settlements.

6 Spatial Analysis

6.1 Introduction

In this chapter, the key sectors of the Prince Albert Local Municipality as a distinct place will be categorised and addressed under three macro layers. The multi layered matrix is illustrated in **Figure 16**.

The Bio-Physical Environment

This natural capital base is the primary or foundational layer on which the remaining two set of layers must feed in a sustainable way. Geology, soils and climate form the basic geomorphological relationship which gives rise to hydrological, topographical and bio-diversity patterns. Agriculture and mining are included in this sub-set due to their close relationship with the natural environment.

The Socio-Economic Environment

This layer follows on the bio-physical layer as it reflects the relationship between population requirements and the natural resource base.

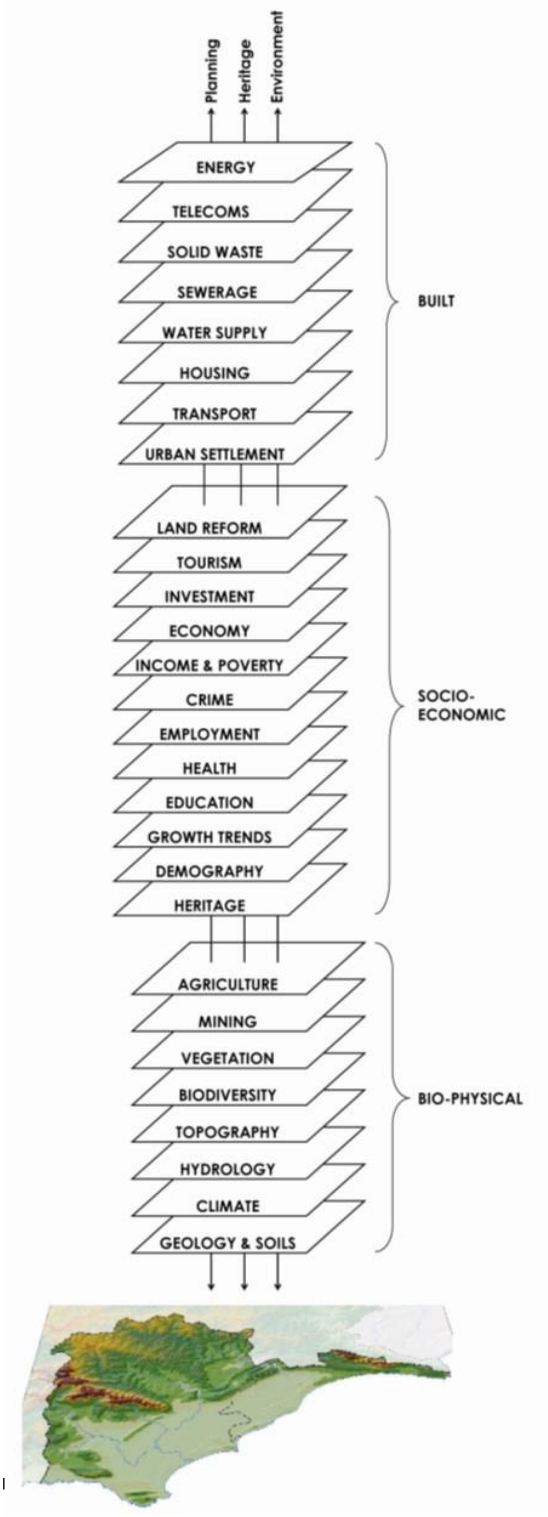
The Built Environment

The built environment in turn reflects the socio-economic base and patterns in any given area.

Although the built environments relationship with the natural resource base is thus derived rather than a primary relationship, it is the components of this built environment layer that impacts the most severely on resource sustainability.[43]

Finally a synopsis will be provided of the key aspects of the above broad categories to be addressed in phase 4 in the form of objectives, policies, strategies and guidelines.

Figure 16 | Spatial Analysis Matrix (Source: DRDLR Guidelines for the Formulation of SDF's)



[43] SOUTH AFRICA. Department of Rural Development and Land Reform. 2011. Guidelines for the I
Government Press. 41 p.

6.2 Bio-Physical Environment

6.2.1 Environmentally Sensitive Development Areas

It is prudent to only allow such development that will be sympathetic to the natural environment and after Environmental Impact Assessments have been done to establish the influence of the proposed development on the environment, or such other legal procedures.

Prince Albert Local Municipality consists out of Prince Albert town, Leeu Gamka village and Klaarstroom village. The reason for existence of the before mentioned town and villages in Prince Albert Local Municipality is their role as Agricultural Service Centres. The town and villages perform important functions:

- As administrative centres for Government;
- As retail centres;
- As centres providing basic educational and health facilities;
- As resource centres for the farming hinterlands;
- Small towns remain important destinations for people migrating from rural to urban areas;
- Prince Albert also turned its smallness into an asset, with innovative tourism.

Because of apartheid style planning, the towns have distinct township or suburb areas. The poor usually live furthest from the centre of town, and the townships and town do not form a coherent whole. The pressures that the above mentioned services have on basic bio-physical resources increase, due to the scarceness of these resources.

Consequently, the pressures on the natural environment have increased. The increasing pressure of development on the natural and human resources within the study area has given rise to acute problems including:

- Growth of informal settlements;
- Loss of biodiversity and heritage resources;
- Pressures on service delivery, waste collection, water supply and sewage treatment.

These issues put pressure on available resources enhancing the importance of the conservation of sensitive environments. Therefore it is imperative that strategic planning for the environment be the forerunner of the development process to ensure sustainable development. Development planning needs to make provision for the adequate protection of sensitive natural features and conservation of the groundwater resources upon which much of the region depends. The areas to avoid, or carefully plan for, include:

- Critical Biodiversity Areas
- Groundwater recharge zones (wetlands)
- Ecological corridors and core/representative habitats
- Agricultural resources

In particular, the following environmental aspects on development must be taken into account:

- Soils and water resources
- Carrying capacity of the natural vegetation
- Importance of the wetlands of the region

The abovementioned is relevant for these land uses exerts inherent pressures on the bio-physical environment. Our analyses will take these as well as historical information into account in order to determine the Bio-physical sensitivity of development within the Prince Albert Local Municipal area.

6.2.2 General Environmental Development Guidelines

The study area, discuss the various principles and guidelines as encapsulated in e.g. Agenda 21, NEMA, and other guideline documents. There is considerable commonality between the various principles of the above-mentioned strategies. These commonalities can be grouped in four broad categories, namely:

- Sustainability
- Optimal utilisation of resources
- Integrative approach
- Participatory approach.

According to the above-mentioned, the principle of sustainable development is notably the most important commonality and should guide the alignment of the IDP with the sector plans. An integrative approach to development, optimal utilisation of resources and public participation are the other general commonalities. Combining these principles in the formulation of environmental strategies for a municipality will contribute to optimal utilisation of resources and effective facilitation of responsible development.

The localised environmental strategies of the Municipality should (based on the NEMA principles), direct future decision-making within the municipality – these guidelines include amongst others:

- Minimising negative impacts on the environment as a whole,
- Minimising negative impacts on people's environmental rights,
- Avoiding pollution and degradation of the environment,
- Avoiding waste through recycling and safe disposal,
- Managing the exploitation of non-renewable natural resources,
- Avoiding the jeopardising of renewable resources and ecosystems,
- Paying specific attention to sensitive, vulnerable, highly dynamic or stressed ecosystems.

6.2.3 Aspects Determining Environmentally Sensitive Areas

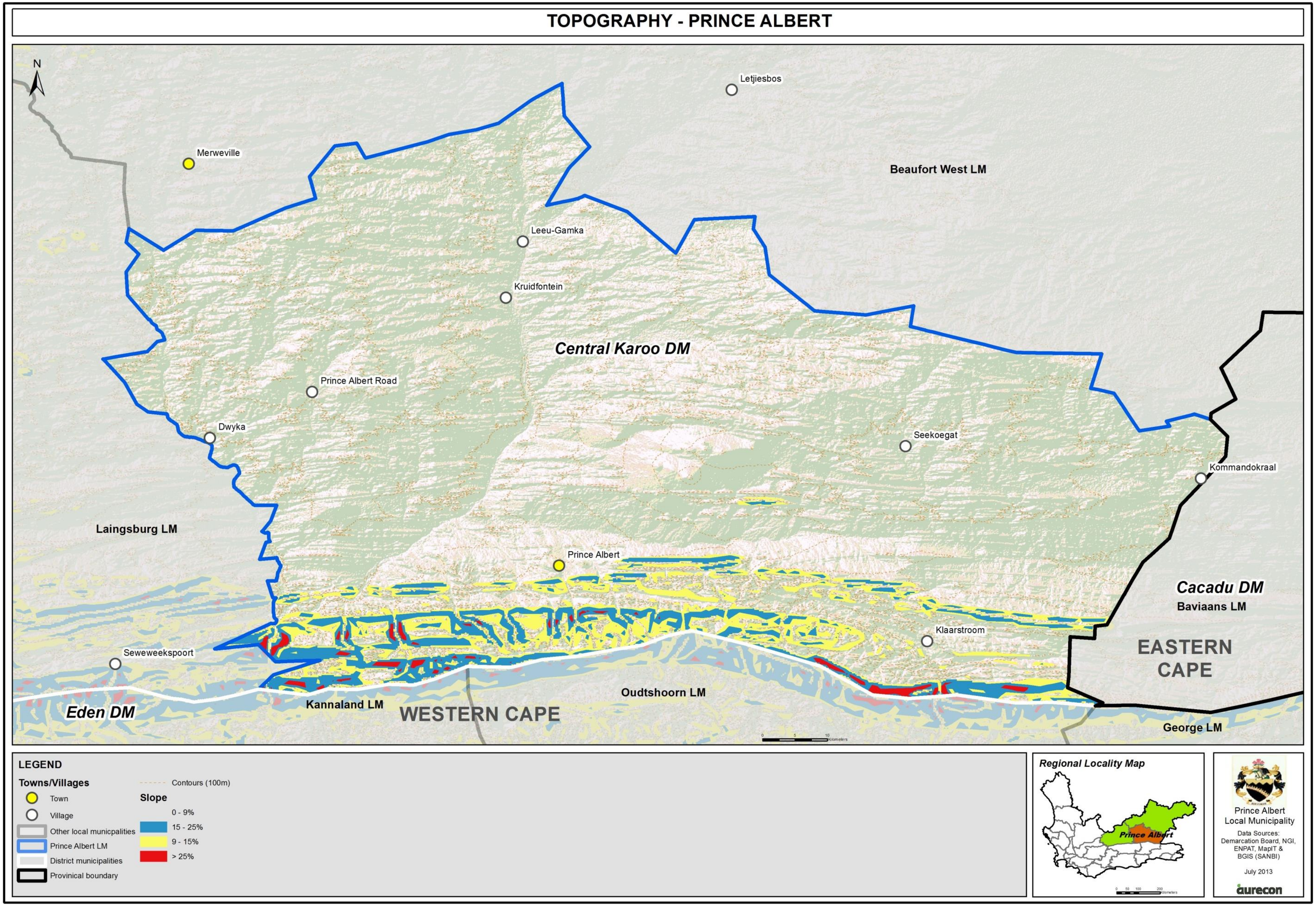
6.2.3.1 Topography and Slope

The majority of the municipality consists of gently undulating plains and the Swartberg mountain rage provide for a dramatic contrast as shown in **Map 7**.

The Swartberg mountain range towards the south of Prince Albert Local Municipality provides a natural barrier between the interior and the Southern Cape coast. This range, one of the longest in South Africa, spans some 230 km form Laingsburg in the west to Willowmore and Uniondale in the east. This range of mountains comprises predominantly of the Table Mountain group, boasting many impressive sand stone strata and rock formations. This mountain range was once considered almost impenetrable, until Meiringspoort and Seweweekspoort were constructed. Subsequently the Swartberg pass was built by Thomas Bain between 1881 and 1888.[44]

[44] CKDM. 2013. Draft Central Karoo District Municipality SDF. Topography and Slopes. p. 31

TOPOGRAPHY - PRINCE ALBERT



Map 7 | Topography

6.2.3.2 Geology and Soil

6.2.3.2.1 Geology

Map 8 below indicates the general pattern of geology within Prince Albert Local Municipality. The municipality comprises of four types of geological formations: Mudstone, Arenite, Shale and Tillite. The major stratigraphy of the region consists of the following sequence from north to south:

Mudstone:

Description: Sedimentary rocks are built up of particles originating from the weathering of other rocks and deposited in one or other depositional basin. Clay-sized particles (mud) are transported in suspension in water and eventually settle in deep water marine or fresh water lakes. After compaction and cementing it is called mudstone. Clay refers to particles smaller than 0.02mm and may consist of the minerals tillite, quartz, feldspar and a mixed layer of montmorillonite-illite and sometimes kaolinite. Mudstone occurs within a succession of coarse-grained sandstone alternating with fine-grained mudrock. The most widespread occurrence is in the Karoo strata, which cover 75% of the central subcontinent.

Arenite:

Description: Arenite is a sedimentary rock. There are three types of arenite: quarts-arenite (quarts grains with secondary silica content), lithic-arenite (quarts and grains of rock like chert and lava), and felspathic-arenite (up to 25% feldspar). These rocks are formed when weathered grains are consolidated into rock via consolidation and cementation. Typically occurs along the coastlines of Southern Africa within the sand deposits.

Shale:

Description: Shale is a sedimentary rock consisting of silt and clay sized particles and with visible layering (fissile) as opposed to a mudstone that is massive. Shale always occurs within a succession of coarse-grained sandstone altering with fine-grained shale (mudrock). The most widespread occurrence is in the Karoo strata which covers 57% of the central subcontinent.

Tillite:

Description: Tillite is a sedimentary rock and typically occurs along the rim of the so-called Karoo Basin. The typical tillite in South Africa consists of a fine-grained groundmass with fragments of a number of different rock types (granite, dolerite, quartzite).[45]

1.1.1.1.1 Minerals

Map 8 below shows the locality of mineral deposits situated within the borders of Prince Albert Local Municipality. The following minerals deposits are found within the municipality:

- Gold
- Chlorine
- Gypsum
- Phosphorus
- Uranium

There are currently no mining of the above minerals within the municipality.

[45] **National Department of Environmental Affairs and Tourism. The Environmental Potential Atlas (ENPAT)**

6.2.3.2.2 Fracking

Shale gas is natural gas produced from shale, a type of sedimentary rock. Shale gas has become an increasingly important source of natural gas in the United States over the past decade. South Africa has a major sedimentary basin that contains thick organic-rich shales: the Karoo Basin in central and southern South Africa.

Several companies intend to explore for shale gas using hydraulic fracturing in the Karoo region. This is bitterly opposed by a coalition of environmentalists, farmers and local residents. Falcon Oil & Gas Ltd. was an early entrant into the shale gas play of South Africa, obtaining an 11,600-mi2 (30 000 km^2) Technical Cooperation Permit (TCP) along the southern edge of the Karoo Basin, which includes the northern part of Prince Albert Local Municipality, see **Map 8 below**.[46]

Implications for Prince Albert Local Municipality: (Source: ENPAT)

- Geology
  - Mudstone & Shale

Engineering Qualities: The rock mass is impermeable and the rock may be of the rapid weathering (slaking) type, which break up after exposure to the atmosphere. If the rock mass is dipping at an angle, slopes are usually unstable and movement may take place along bedding planes. If the original clay was of the expansive types, then the rock and the residual soils will be expansive and may cause damage to structures. Weathered and unweathered mudrock are used as brick-making material.

  - Arenite

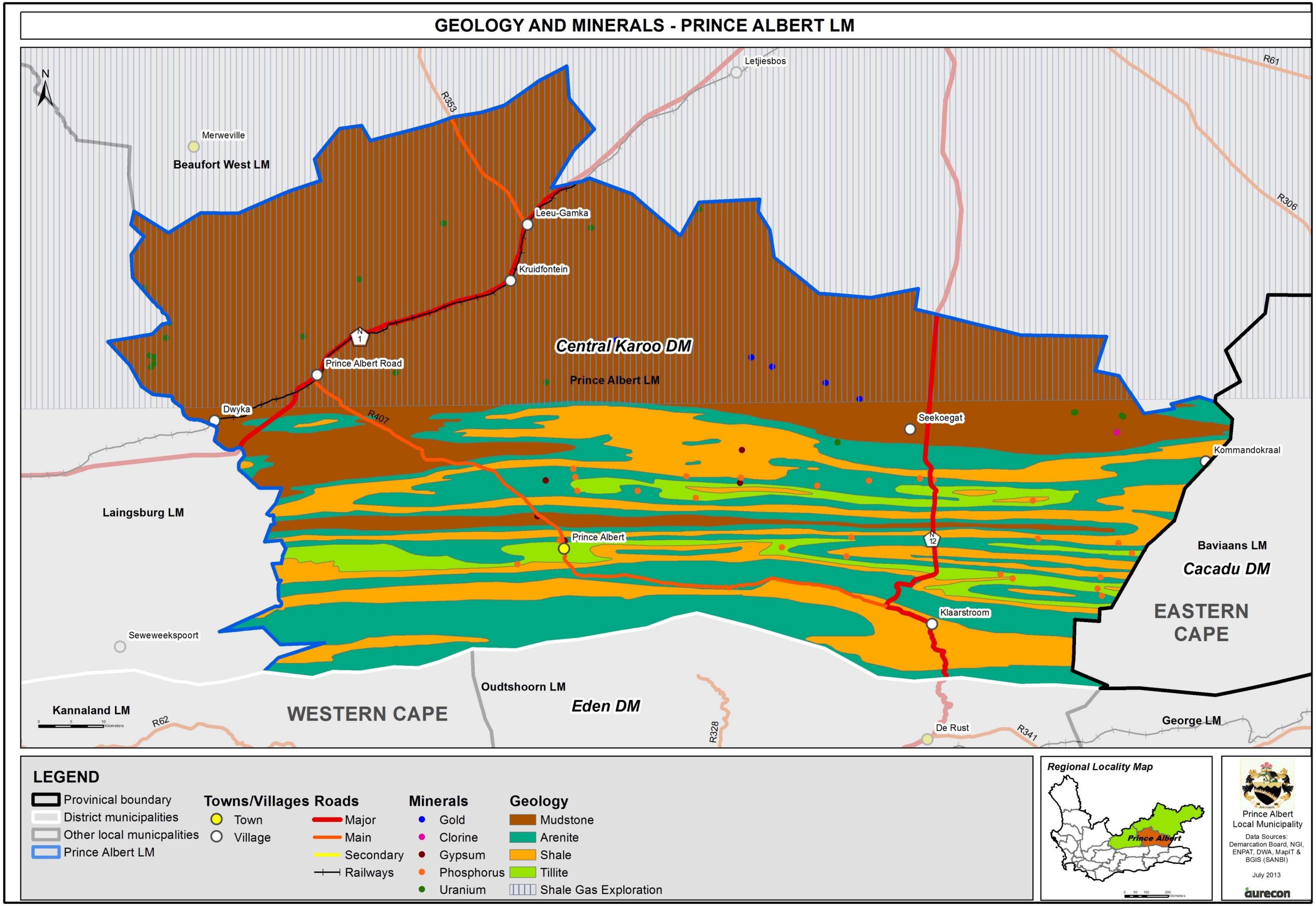
Engineering Qualities: Very low groundwater yields are typical and it is used as a construction material after washing to get rid of the high salt content.

  - Tillite

Engineering Qualities: Slope instability may cause problems in exposed slopes and cuttings. It is a good construction material, but may break down. The soils are sometimes expansive and usually dispersive

- Risks of Fracking.
  - Water is a scarce resource in Prince Albert Local Municipality and fracking requires the use of 6-25 million litres of water for each well that is drilled.
  - Fracking also poses a risk for contamination of ground water as between 3000-25000 litres of chemicals is added to water that is used.
  - Mining activities in Prince Albert Local Municipality will result in increased traffic volumes, increased housing demand and the deterioration of transport infrastructure.

[46] **Econometrix (Pty) Ltd. 2012. Karoo Shale Gas Report. p.15**



Map 8 | Geology and Minerals – Prince Albert Local Municipality (Econometrix, 2012)

6.2.3.2.3 Soil depth

Soil Depth can be defined as: “The unconsolidated material immediate the surface of the earth that serves as natural medium for growing plants. Soil depth defines the root space and the volume of soil from where the plants fulfil their water and nutrient demands.”[47] **Figure 17 below** gives a visual representation of soil depth. **Map 9 below** shows that the majority of Prince Albert Local Municipality has soil depths of less than 450mm and the rest of the municipal area has soil depths ranging from 450mm to 750mm.



Figure 17 | Soil Depth[48]

6.2.3.2.4 Clay Percentage

Soil particles can be divided into the 3 separate size classes, which include sand, silt, and clay. The size of sand particles range between 2.0 and 0.05 mm; silt, 0.05 mm and 0.002 mm; and clay, less than 0.002 mm.

There is a fundamental difference between soils that contain large amounts of sand particles and soils that contain large amounts of very small particles, such as clay. The total surface area of a given mass of clay is more than a thousand times the total surface area of sand particles with the same mass. This increase in surface area has an important implication in nutrient management because it provides many places for soil particles to retain and supply nutrients (such as calcium, potassium, magnesium, phosphate) and water for plant uptake.

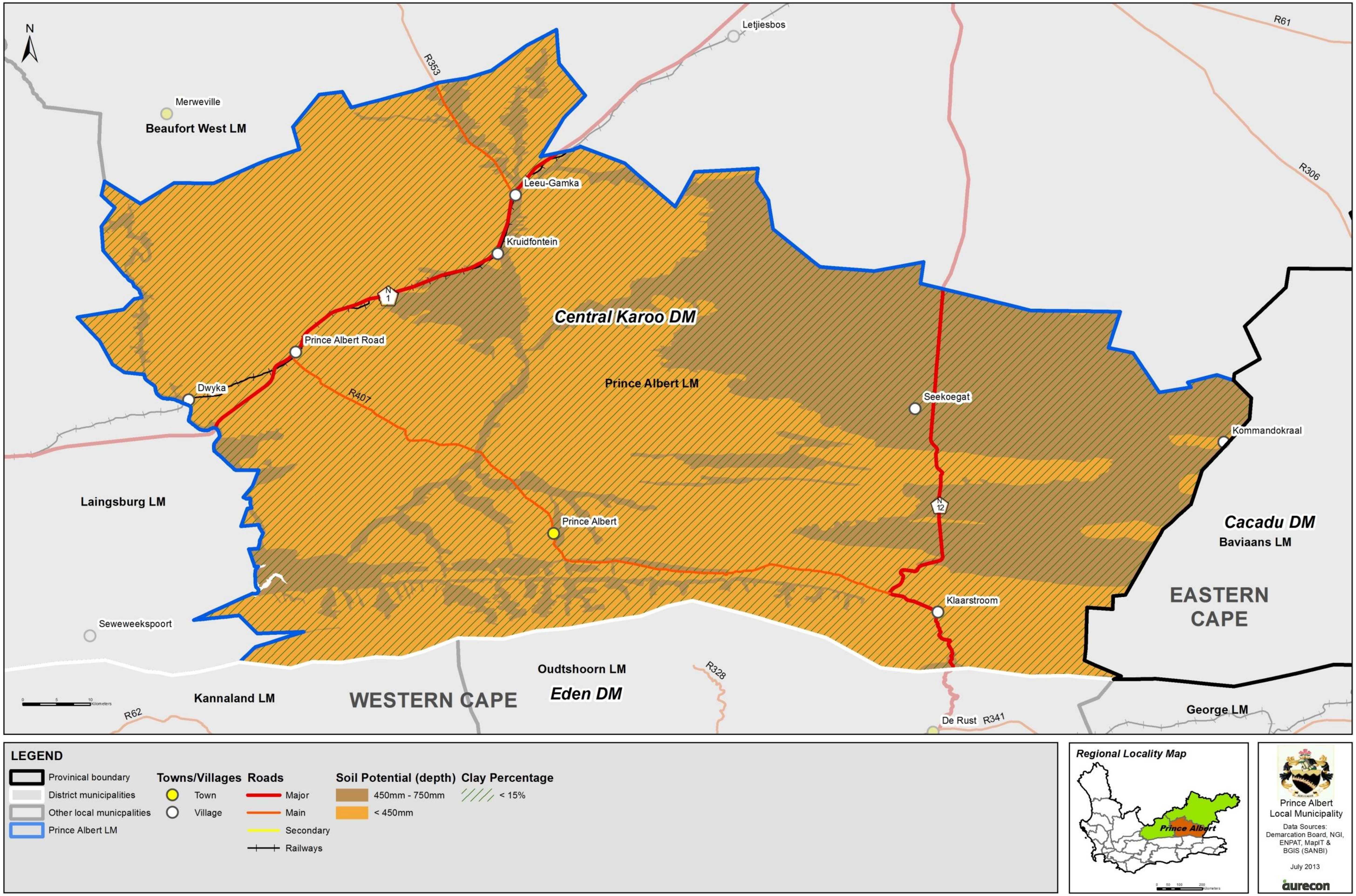
The whole of Prince Albert Local Municipality has a percentage clay of less than 15%, **see Map 9 below.**

Implications for Prince Albert Local Municipality:

- Those areas with the greater soil depth are more arable and should therefore be protected.
- The area is vulnerable to wind erosion and development needs to take this into account. Also activities such as overgrazing can increase the destabilization of the area and increase wind erosion. These activities should be carefully managed.
- The soil in Prince Albert Local Municipality has a low ability to retain and supply nutrients.
- The Prince Albert Municipal area has an clay content of below 35%, thus a geotechnical study in this regard is generally not required where development is planned.

[47] DIS4ME. 2004. Soil Depth. http://www.unibas.it/desertnet/dis4me/indicator_descriptions/soil_depth.htm. Date of access: 18 July 2013
[48] DIS4ME. 2004. Soil Depth. http://www.unibas.it/desertnet/dis4me/indicator_descriptions/indicator_description_images/soil_depth_1.jpg. Date of access: 18 July 2013

SOIL DEPTH AND CLAY PERCENTAGE - PRINCE ALBERT LM



Map 9 | Soil Depth and Clay Percentage – Prince Albert Local Municipality

6.2.3.3 Agriculture & Agri-processing

About 45% of South Africa's agricultural exports move through the Western Cape province and the value added in the sector amounts to more than R14 billion per annum.

The Western Cape Department of Agriculture has a direct or indirect influence on the production of wine, deciduous fruit, citrus, grain, fynbos, vegetables, ostriches, small and large stock, as well as milk and dairy products.[49]

The Central Karoo District contributes 2.36% to the provincial total and 0.56% to the National total GVA for the "Agriculture, hunting, forestry and fishing" sector.[50]

Map 10 shows the land capability of Prince Albert Local Municipality. The majority of the municipal land is non-arable which has a low potential grazing land capability. Towards the southern part of the municipal area, the Swartberg Mountain range area, the land capability is Wilderness. Wilderness does not qualify as wetlands, grazing land or arable land, but are important for the survival of certain species and biodiversity.

Even though the majority of the land has a non-arable land capability there are some crop, deciduous fruit and livestock farming that thrive in the varied climates and soils of Prince Albert Local Municipality. The main crops are apricot, olive, lucerne and wine grapes with smaller plantings of peach, pear, prune, quince and table grapes. Annual crops are mostly vegetable seed of which onion seed dominates. These crops are transported to Cape Peninsula were its processed.

Olives are primarily planted to be pressed for olive oil and is of very high quality. These crops are mainly situated in the Prince Albert and Leeu Gamka area.

Apricots are the dominant stone fruit planted in the Prince Albert areas primarily for the export markets. Small plantings of peach, pear, prune and quince also occurs.

Wine grapes has become the dominant crop in the Prince Albert Valley in recent years

Vegetable seed, the isolated nature of the production areas of the Central Karoo is ideal for vegetable seed production. The main crop is onion seed, exclusively produced under contract with seed companies e.g. Klein Karoo Seeds. [51]

Livestock farming with sheep, angora goats and game farming are well established. The mohair producers have consistently produced most of the world's highest quality clip, obtaining the highest prices for the last 30 years.

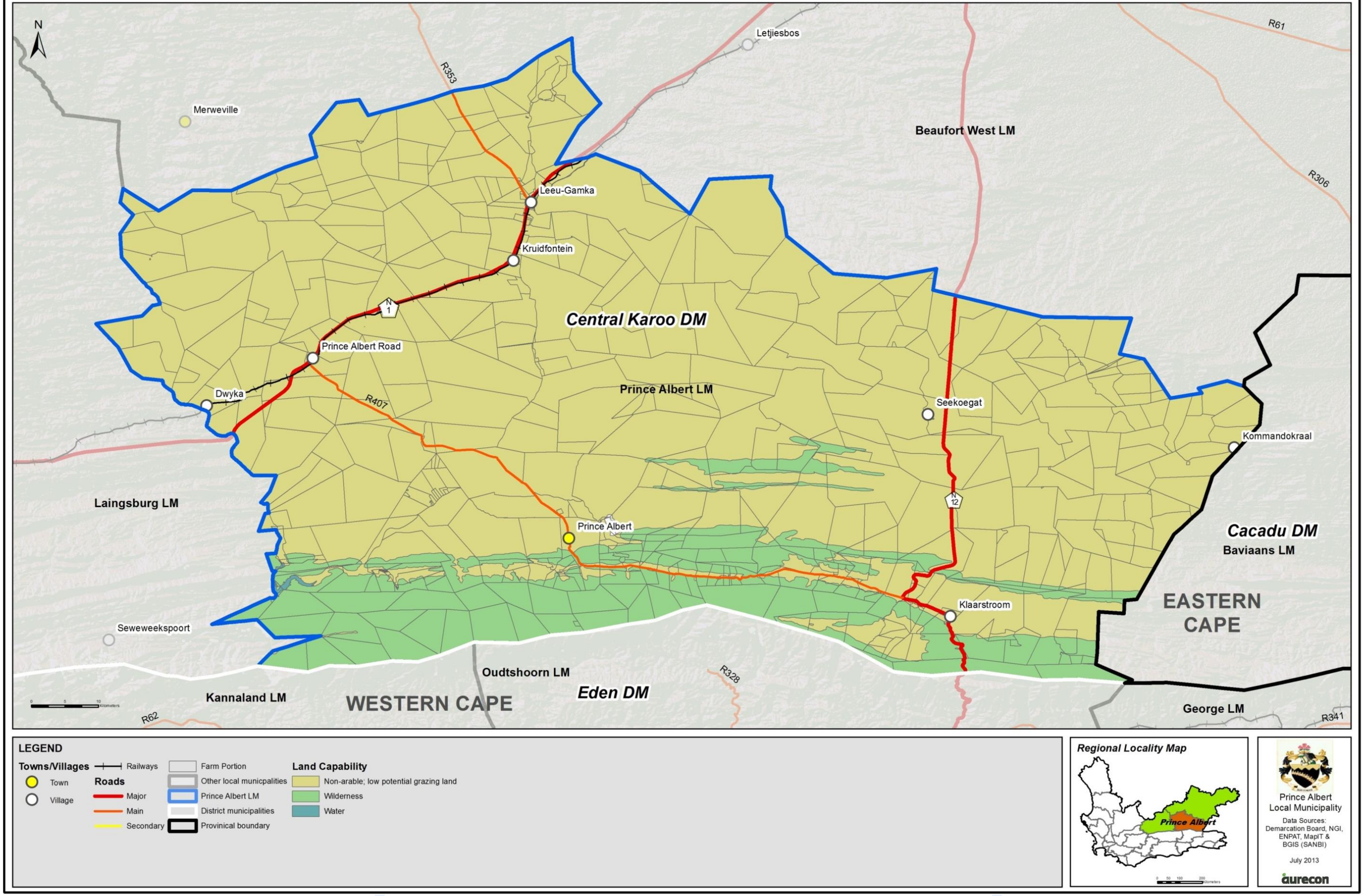
The rapidly expanding mohair industry provides much local employment and mohair products are sold locally at the Prince Albert's Weavery and the Prince of Africa Crafts shop.[52]

Implications for Prince Albert Local Municipality:

- In order to increase the stock carrying capacity, proper and sustainable veld management practices need to be promoted.

[49] Western Cape Government. 2013. Agriculture. http://www.westerncape.gov.za/eng/your_gov/4182. Date of access: 04 June 2013
[50] CNDV. 2013. Draft Beaufort West Municipal SDF. p102
[51] PRINCE ALBERT LOCAL MUNICIPALITY. 2012. Prince Albert Local Municipality 3rd Generation IDP, 2012-2017. p. 43
[52] PRINCE ALBERT. 2013. Prince Albert is proud home to the oldest Angora stud in South Africa. http://www.princealbert.org.za/more-about-prince-albert/farming/angoramohair/. Date of access: 04 June 2013

LAND CAPABILITY - PRINCE ALBERT LM



Map 10 | Land Capability

6.2.3.4 Climate

6.2.3.4.1 Temperature

The Inland and coastal temperatures of the Western Cape Province usually differ as the mild, dry and very sunny summers warm the coast with temperature lows of 15°C and highs averaging 27°C, and inland temperatures are often 3 – 5°C higher than the coastal areas.[53]

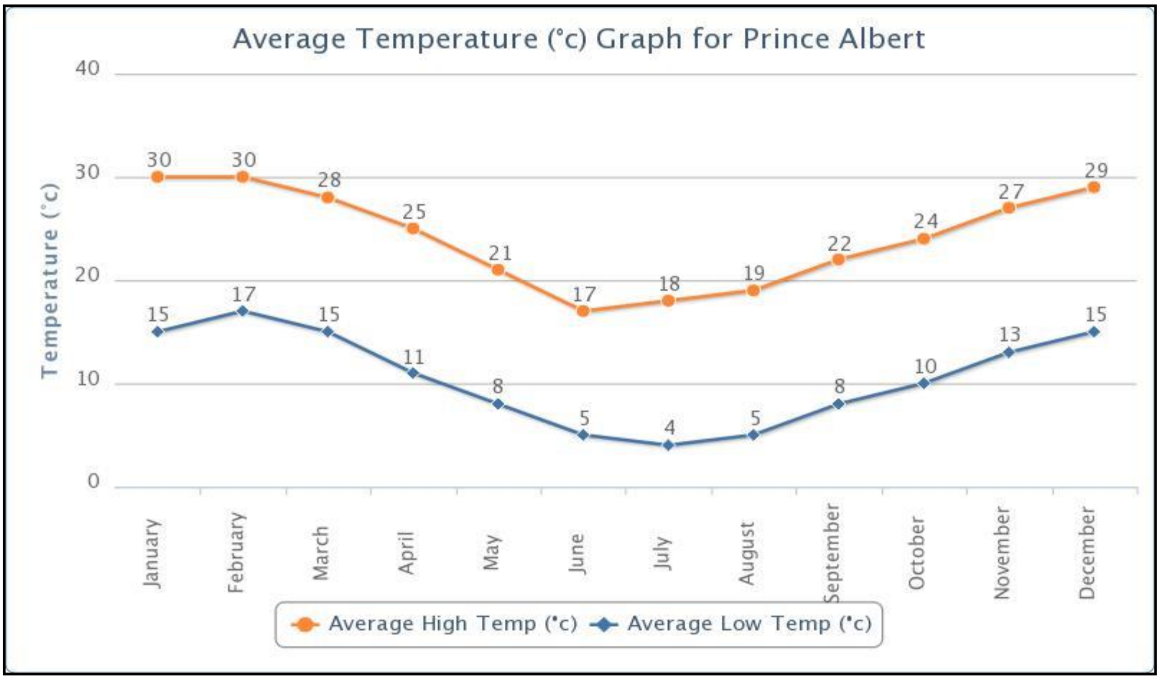
The temperature regime of the Central Karoo District Municipality is typically continental, meaning there is a large difference between the mean temperature of the coldest and warmest month. January is generally the warmest month with mean maximum temperatures between 28 and 32°C. Heat wave conditions do occur and could induce temperature in excess of 40°C. The coldest months are June and July, with early morning temperatures regularly dropping to below 0°C. Frost is therefore common in the entire study area, with severe frost at the higher altitudes.[54]

According to **Map 11** below the mean annual temperature for Prince Albert Local Municipality ranges between 17 and 20°C towards the north western side of the municipality, between 8 and 12°C towards the south eastern side and between 13 and 16°C towards the southern side.

The average monthly minimum and maximum temperatures for Prince Albert is shown on the figure above. **Figure 18** shows that:

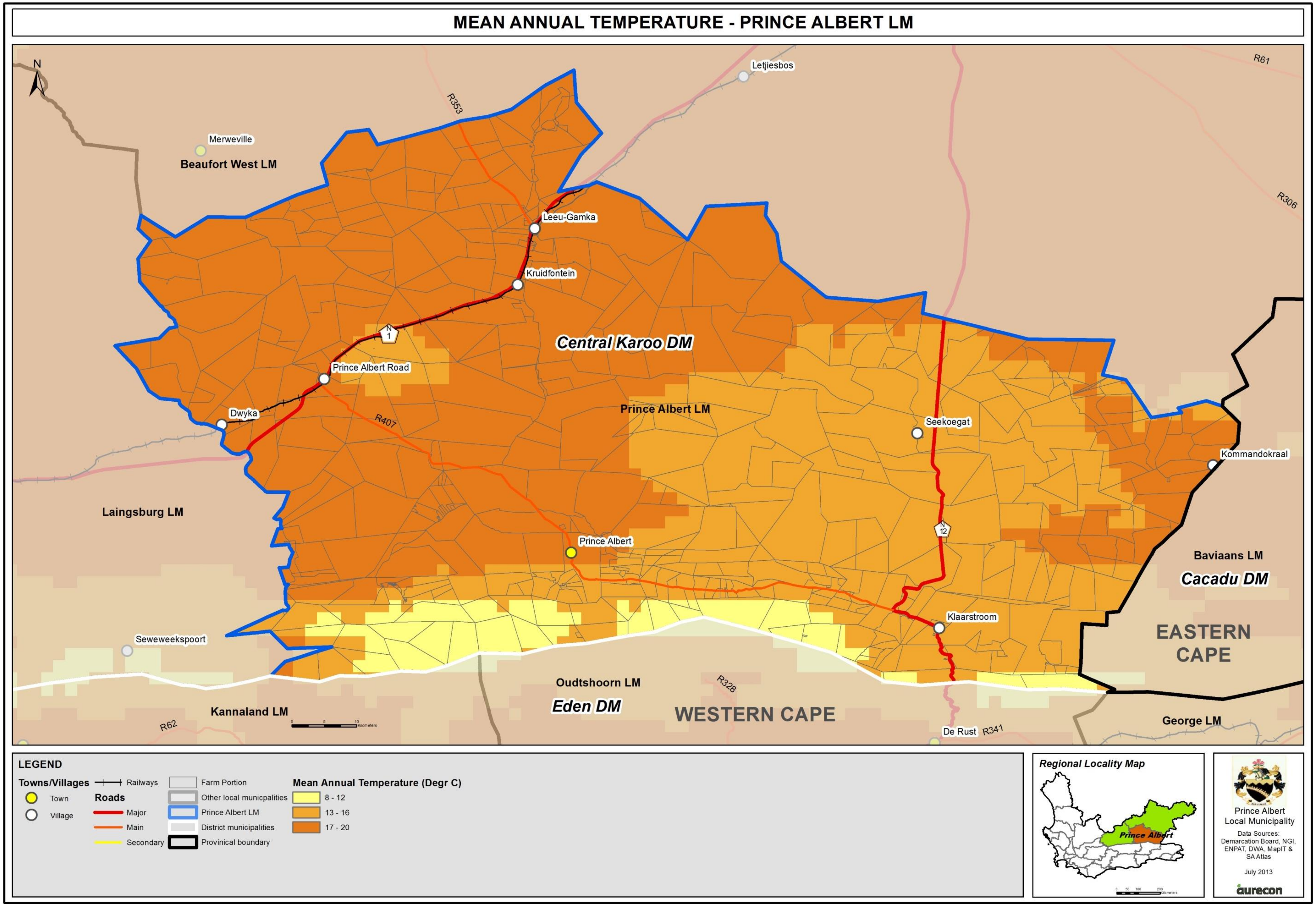
- The maximum temperatures are experienced between December and February and reaches levels of up to 30°C. The maximum temperatures vary between 17°C and 30°C.
- The minimum temperature is experienced between June and August and reaches a low of 4°C. The minimum temperatures vary between 4°C and 17 °C.

Figure 18 | Prince Albert: Average Temperatures[55]



[53] SOUTH AFRICA.COM. 2013. The climate of the Western Cape Province. http://www.southafrica.com/western-cape/climate/. Date of access: 15 May 2013
[54] CENTRAL KAROO DISTRICT MUNICIPALITY. 2012. Central Karoo District Municipality 3rd Generation IDP, 2012-2017. p. 61
[55] WORLD WEATHER ONLINE. 2013. Prince Albert Weather, South Africa Weather Averages. http://www.worldweatheronline.com/Prince-Albert-weather-averages/Western-Cape/ZA.aspx. Date of Access: 14 May 2013

MEAN ANNUAL TEMPERATURE - PRINCE ALBERT LM



Map 11 | Mean Annual Temperature

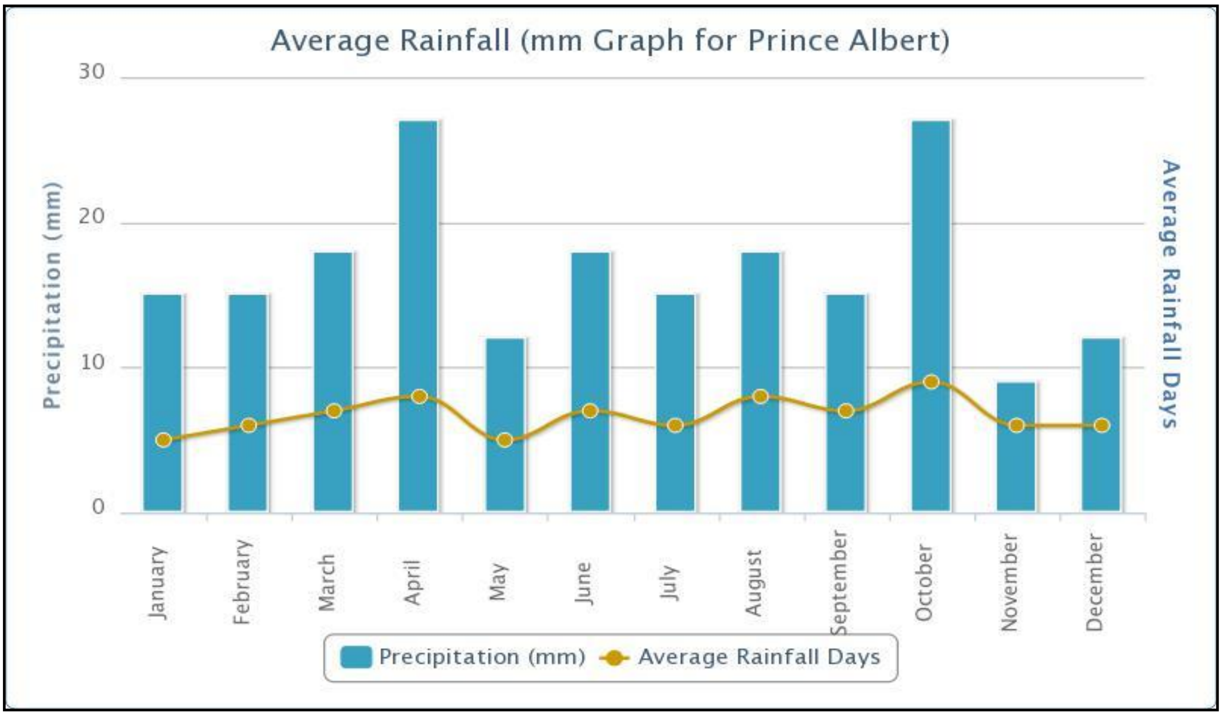
6.2.3.4.2 Rainfall

The climate of Central Karoo District Municipality is arid to semi-arid. **Map 12** shows the mean annual precipitation for the majority of the municipal area ranges between 20 and 473 mm. The mean annual precipitation towards the Groot Swartberg mountain range, south of Prince Albert, ranges between 474 and 926 mm.

The average monthly rainfall for Prince Albert is shown in **Figure 19** below. The following can be deducted from the figure:

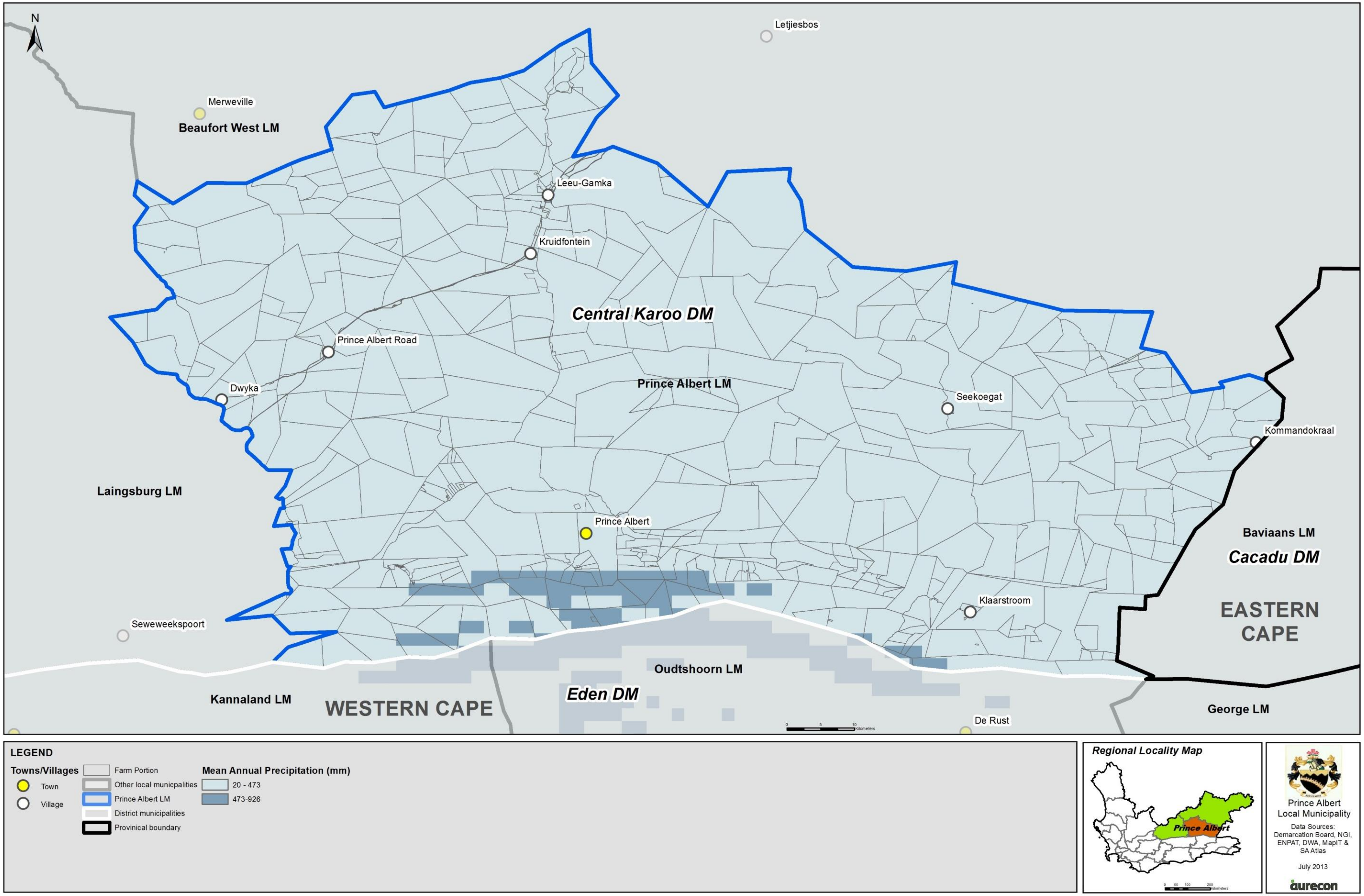
- The highest rainfall months are generally recorded in April and October; and
- November is generally the lowest rainfall month.

Figure 19 | Prince Albert: Average Rainfall[56]



[56] SOUTH AFRICA.COM. 2013. The climate of the Western Cape Province. http://www.southafrica.com/western-cape/climate/. Date of access: 15 May 2013

MEAN ANNUAL PRECIPITATION - PRINCE ALBERT LM



Map 12 | Mean Annual Precipitation

6.2.3.4.3 Climate change

The Climate Change strategy of the Western Cape identified the following climate change stress factors in the Western Cape:

- An increase in the annual average temperature of at least 1°C by 2050.
- Reduced rainfall in the western parts of the Western Cape
- Decreased water resources
- Reduced soil moisture from an increase in temperature coupled with a decrease in average precipitation.
- Possible increase in the frequency and intensity of extreme weather events (e.g. flooding).
- An increase in conditions conducive to wildfires (higher • temperatures and increased wind velocity)
- Temperature impacts on crop activities crop burn, drought, pests and microbes resulting in yield reductions, and loss of rural livelihoods.[57]

A Status Quo, Vulnerability and Adaptation Assessment of the Physical and Socio-Economic Effects of Climate Change in the Western Cape were compiled by the Department of Environmental Affairs and Development Planning. The following key applicable climate change adaptations were identified:

- Increased irrigation efficiencies, rather than trying to increase the quantity supplied.
- Improve the quality of effluent for re-use, particularly where some users might not need drinking water quality.
- Constrain development where water resources are limited and development opportunities where water resources are available.
- Strict groundwater management systems would need to be put in place to prevent over-abstraction and subsequent damage of the resource.
- Wildfires
  - Investment in firefighting personnel and equipment will be essential for protecting assets.
  - Removal or control of flammable alien species that accumulate large fuel loads will become an even greater imperative.
- Effective planning for the protection of biodiversity
- Future sustainable water supplies
  - Desalination
  - Marginal changes in construction of infrastructure
  - Control of water pollution / water quality
  - Modification of the vegetation in various catchments, where water-thirsty vegetation with high transpiration rates has reduced the stream flow.
  - Transfers of water between basins may result in more efficient water use under the current and future changed climate.
  - Reconciliation of water demand and supply both for the medium and long term.
- Reducing water demand
  - Reduction of losses due to agriculture
  - Potential sites for new dams should be kept open till they are required.
  - Improved monitoring and forecasting systems for floods and drought.
  - Contingency planning for drought
  - Allocation of water supplies by market-based systems
  - Re-use and recycling of water
  - Reduction in water services losses[58]

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[57] **DEA&DP. 2008. A climate change strategy and Action Plan. p. 5**
[58] **DE&DP. 2005. A status quo, vulnerability and adaptation Assessment of the Physical and Socio-Economic Effects of Climate Change in the Western Cape. p. 101-115**

Further to the above the Central Karoo Biodiversity Assessment highlighted the following important aspects that can possible impact climate change adaptation:

- **Unfragmented areas** play an important role in climate change adaptation as they allow relatively unrestricted movement of species across the landscape, which ensures that they can adapt naturally to climate change.
- **A riparian corridor** (a unique plant community consisting of the vegetation growing near a river or stream) represent important linkages across the landscape, particularly in arid and poorly differentiated habitats.
- **South facing slopes** represent important climate change refuges. These areas are likely to serve as refuge habitats during period of temperature increase and moisture decrease as they naturally have lower temperatures and higher moisture levels that the general landscape.
- **Areas of high topographic diversity** are important for a number of reasons:
  - The representation of rare or unique features that are not encountered more widely in the landscape.
  - Associated with keystone ecological process features such as inselbergs, cliff faces, springs and caves.
  - Are an important refuge habitat in the face of climate change
  - These areas also include important altitude, temperature and moisture gradients which need to be protected to allow climate change adaptation.
- **Kloofs** are an important habitat for biodiversity for a variety of reasons:
  - The representation of rare or unique features that are not encountered more widely in the landscape
  - Associated with keystone ecological process features such as springs and caves
  - Are an important refuge habitat in the face of climate change

Implications for Prince Albert Local Municipality:

- The relevant refugia, i.e. south-facing slopes, kloofs and riparian habitats have been considered in the systematic biodiversity planning process. Critical Biodiversity Areas will be assigned the Core 1 Spatial Planning Category and Ecological Support Areas will be assigned the Core 2 Spatial Planning Category.

6.2.3.5 Air Quality

There are relatively few sources of air pollution in the Prince Albert municipal area; as a result the air quality is generally good. [59] The following minor issues in terms of atmospheric pollution are identified in the Draft Air Quality Management Plan of Prince Albert Local Municipality:

- Dust from unpaved roads in the sub-economic housing areas of Leeu-Gamka, Prince Albert and Klaarstroom.
- Dust from the unpaved roads that carry heavy traffic, such as the road between Prince Albert and Leeu-Gamka.
- Dust from large ploughed fields.
- Dust from the area cleared of vegetation at the north end of Prince Albert and the tar road between Prince Albert and Prince Albert road.
- The emissions caused by the burning of wood and paraffin for the purposes of cooking, heating and lighting in many homes in the Prince Albert Municipal area but particularly in low income areas.

[59] PRINCE ALBERT LOCAL MUNICIPALITY. 2012. Prince Albert Local Municipality 3rd Generation IDP, 2012-2017.

- The burning of waste at landfill sites in Prince Albert, Leeu-Gamka and Klaarstroom emits toxic gasses.
- The vehicle omissions caused by of the high volumes of traffic volumes through Leeu-Gamka and Klaarstroom.
- The spray of pesticides in areas of intensive cultivation of vines, deciduous fruit or vegetable seed crops.
- The burning of crops residues.[60]

Implications for Prince Albert Local Municipality:

- The air quality of Prince Albert Local Municipality is good, thus a decreased risk for multiple health conditions exist in Prince Albert Local Municipality.

6.2.3.6 Hydrology

Groundwater is one of the key environmental resources in the study area. Boreholes satisfy a large portion of the demand for potable as well as irrigation water. No clear indication is present yet that current level of abstraction is lowering the water table, but overexploitation is always a risk in such a low rainfall area.

Good quality water and adequate water flow are required to sustain the growth of specific riverine ecosystems. Aquatic habitat integrity and water quality are major determinants of the biological communities in a system. If habitat is lost or degraded for any number of reasons, the biological integrity of the system will be adversely affected. Thus, habitat availability and diversity are important in supporting diverse biological communities and provides an indication of the current ecological integrity of an ecosystem.

Intensive degradation/transformation of the riverine habitats takes place in the form of formal development such as roads and infrastructure, as well as land use practices such as riverbed agricultural cultivation and overgrazing. Invasive alien species have also colonized localized sections of water courses, and have the potential to spread as their seeds are dispersed by water or bird species.

Prince Albert Local Municipality is situated in the Gouritz Water Management Area. There are three large dams situated in Prince Albert Local Municipality, namely Gamkapoort Dam, Oukloof Dam and Leeu-Gamka Dam and four perennial rivers, namely the Gamka, Dwyka, Aaps and Groot River. The full storage capacities of the before mentioned dams are indicated in **Table 3** below:

Table 3 | Storage Capacity of the dams[61]

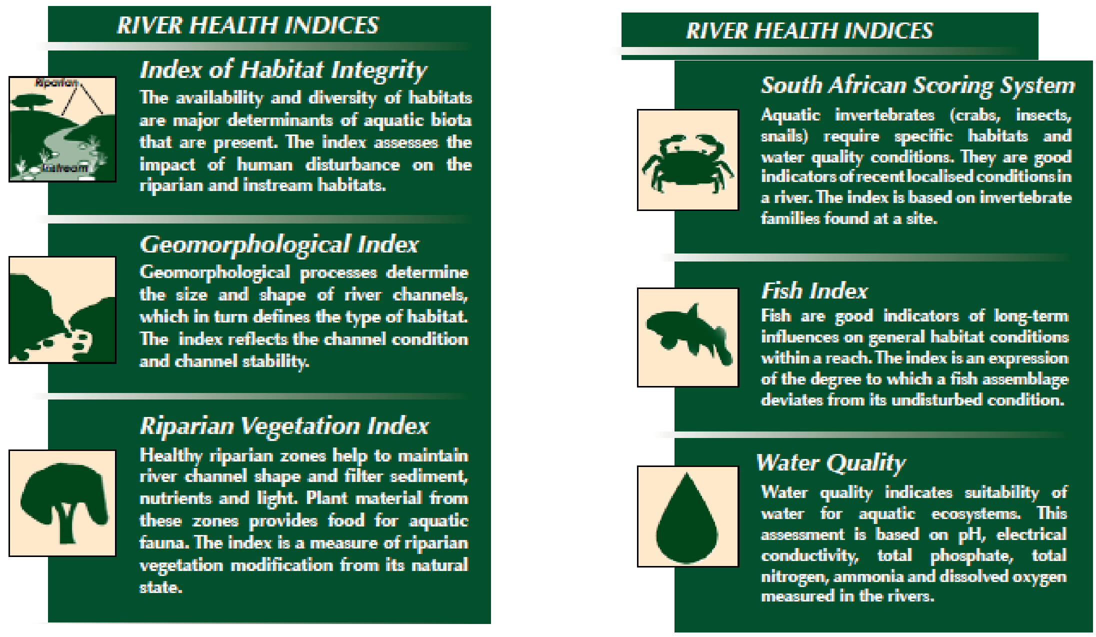
Dam	Full Storage Capacity (Mm^3)	Water course (River)
Gamkapoort	36.3	Gamka River tributary of the Gouritz
Leeu Gamka	13.6	-
Oukloof	4.2	Cordiers River

[60] Prince Albert Local Municipality. Date unknown. Draft Air Quality Management Plan no page numbers
[61] DEPARTMENT OF WATER AFFAIRS. 2013. Gouritz WMA of Dams. http://www.dwaf.gov.za/Hydrology/Weekly/wmaweek.aspx?region=16. Date of Access: 05 June 2013

Healthy rivers provide goods and services (water supply, natural products, breakdown of pollutants, conservation, flood attenuation, recreation and spiritual value) that contribute to human welfare, economic growth and sustain biodiversity. When people use rivers, they impact on river health. The National River Health Programme assesses the health of rivers by measuring selected ecological indicator groups that represent the condition of the larger aquatic ecosystem. The overall ecological status of a river is expressed as the **EcoStatus**, which provides an integrated value of all the ecological indices assessed for that particular reach. The ecological **importance** and **sensitivity** rating (EIS) provides an indication of the level of protection that a river should receive.[62] See **Table 4** below for a more comprehensive explanation.

Table 4 | Measuring River Health[63]

Selected ecological indicator groups that represent the condition of the larger aquatic ecosystem



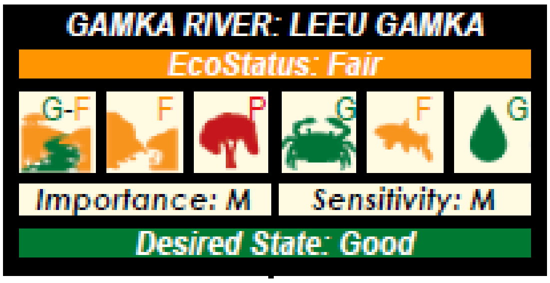
Ecological importance and sensitivity rating (EIS)

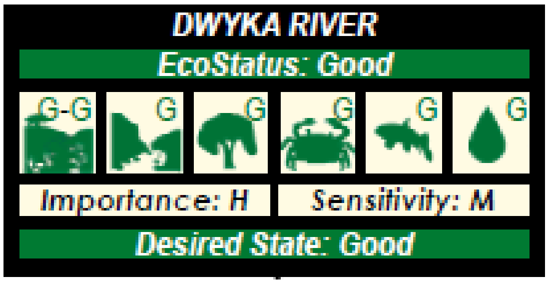
EIS Category	Description
Very High (VH)	A very high or high EIS indicates a strong ecological motivation for awarding a high level of protection to the associated river. Such rivers should be maintained in a natural or good river health category.
High (H)	
Moderate (M)	A moderate or low/marginal EIS is representative of a river with a relatively lower conservation value. Such river catchments are more impacted and thus more suited to development.
Low/Marginal (L)	

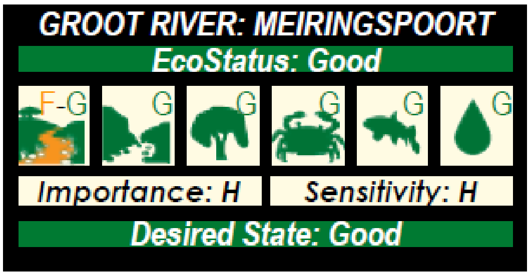
[62] RIVER HEALTH PROGRAMME. 2007. State of Rivers Report: Rivers of the Gouritz Water Management Area. Department of Water Affairs and Forestry, Pretoria
[63] RIVER HEALTH PROGRAMME. 2007. State of Rivers Report: Rivers of the Gouritz Water Management Area. Department of Water Affairs and Forestry, Pretoria

Overall Ecological Status		
River Health Category	Ecological Perspective	Management Perspective
Natural N	No or negligible modification from natural	Relatively little human impact
Good G	Biodiversity and integrity largely intact	Some human-related disturbance but ecosystems essentially in good state
Fair F	Sensitive species may be lost; tolerant or opportunistic species dominate	Multiple disturbances associated with the need for socio-economic development
Poor P	Mostly tolerant species; alien invasion, disrupted population dynamics; organisms often diseased	High human densities or extensive resource exploitation

According to the State of Rivers Report the health of the rivers situated within the borders of Prince Albert Local Municipality are as follows:







The National Freshwater Ecosystem Priority Areas project identified priorities for conserving South Africa's freshwater ecosystems and supporting sustainable use of water resources. These strategic spatial priorities, known as Freshwater Ecosystem Priority Areas (FEPAs), are indicated on **Map 13** below.

River FEPAs achieve biodiversity targets for river ecosystems and threatened/near-threatened fish species, and were identified in rivers that are currently in a good condition (A or B ecological category). Their FEPA status indicates that they should remain in a good condition in order to contribute to national biodiversity goals and support sustainable use of water resources.

The FEPA status applies to the actual river reach but the surrounding land and smaller stream network need to be managed in a way that maintains the good condition (A or B ecological category) of the river reach.

It is important to note that river FEPAs currently in an A or B ecological category may still require some rehabilitation effort, e.g. clearing of invasive alien plants and/or rehabilitation of river banks.

Wetland and estuary FEPAs

Wetland FEPAs currently in a good ecological condition should be managed to maintain this condition. Those currently not in a good condition should be rehabilitated to the best attainable ecological condition.

Wetland cluster

Wetland clusters are groups of wetlands embedded in a relatively natural landscape. This allows for important ecological processes such as migration of frogs and insects between wetlands. In many areas of the country, wetland clusters no longer exist because the surrounding land has become too fragmented by human impacts.

Fish sanctuary and associated sub-quaternary catchment

Fish sanctuaries are rivers that are essential for protecting threatened and near-threatened freshwater fish that are indigenous to South Africa. A red fish indicates that there is at least one population of a critically endangered or endangered fish species within that sub-quaternary catchment. A white fish indicates the presence of vulnerable or near-threatened fish populations.

A goal of NFEPA is to keep further freshwater species from becoming threatened and to prevent those fish species that are already threatened from going extinct. In order to achieve this, there should be no further deterioration in river condition in fish sanctuaries and no new permits should be issued for stocking invasive alien fish in farm dams in the associated sub-quaternary catchment.

Fish Support Area and associated sub-quaternary catchment

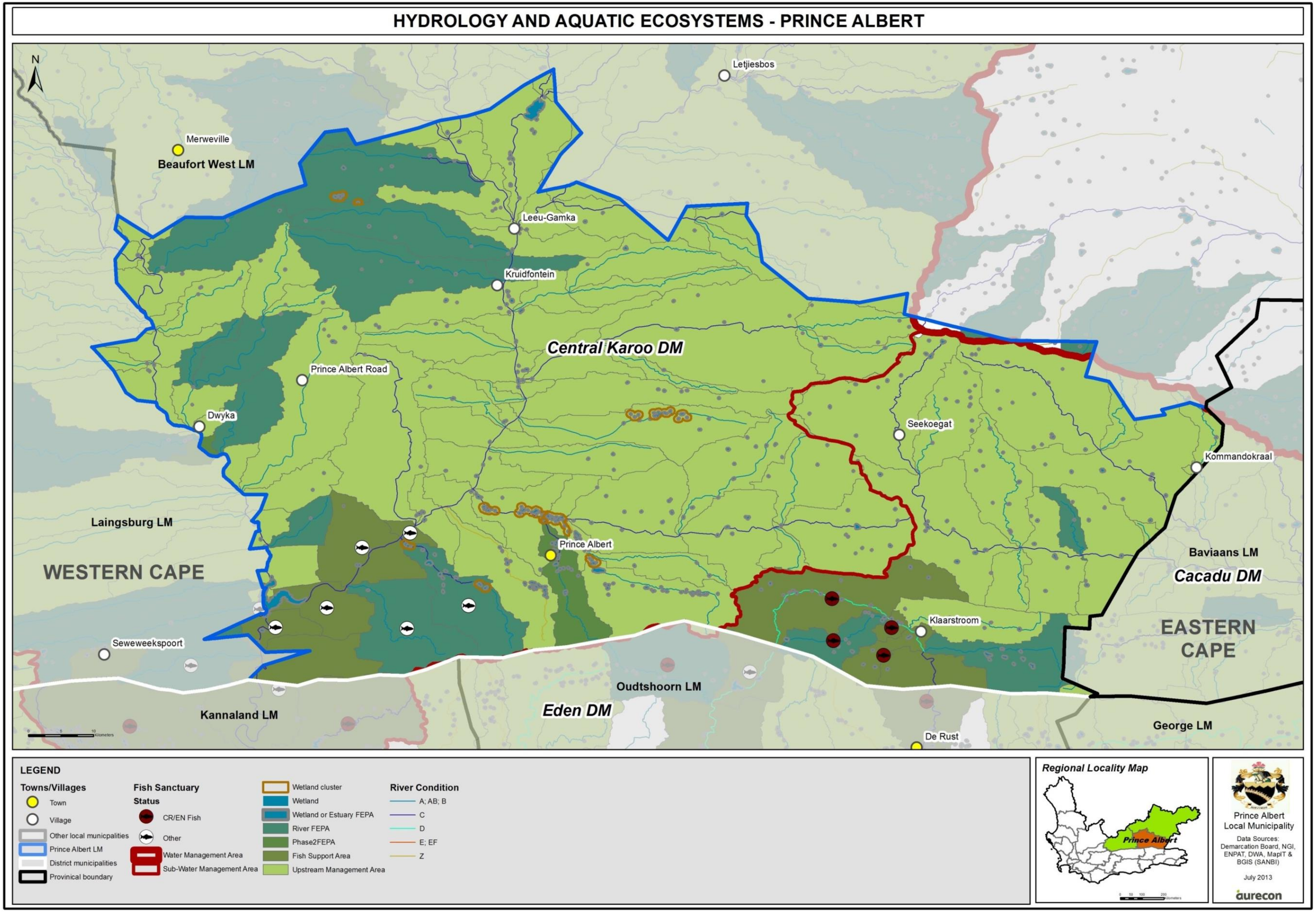
The fish sanctuaries in lower than an A or B ecological condition were identified as Fish Support Areas, and the associated sub-quaternary catchment is shown in medium green. Fish Support Areas also include sub-quaternary catchments that are important for migration of threatened or near-threatened fish species – these are not marked with a fish symbol.

Upstream Management Areas are sub-quaternary catchments in which human activities need to be managed to prevent degradation of downstream river FEPAs and Fish Support Areas.

Phase 2 FEPAs were identified in moderately modified rivers (C ecological category). The river condition of these Phase 2 FEPAs should not be degraded further, once FEPAs in good condition are considered fully rehabilitated and well managed, the Phase 2 FEPAs should be rehabilitation.

Implications for Prince Albert Local Municipality:

- The Gamka River should be rehabilitated to improve its EcoStatus to the desired state.
- Fish management plans should be developed for all fish sanctuaries to protect the fish they contain.



Map 13 | Hydrology and Aquatic Ecosystems Map

6.2.3.7 Biodiversity

1.1.1.1.1 Biome

The Nama-Karoo Biome is the second largest biome in South Africa and covers the largest part of Prince Albert Local Municipality, see **Map 14** below. This biome is a grassy dwarf shrubland which is highly erodible.

The Swartberg Mountain is covered with the Fynbos Biome on the southern side and the Succulent Karoo and Albany Thicket Biome on the northern side. The Fynbos Biome includes the true Fynbos and Renosterveld Vegetation types and is characterized by a high plant biodiversity. The vegetation of the Succulent Karoo Biome is dominated by dwarf, succulent shrubs and flowers and the Albany Thicket Biome is transition vegetation, described as a closed shrubland to low forest in which evergreen succulent trees are dominant.

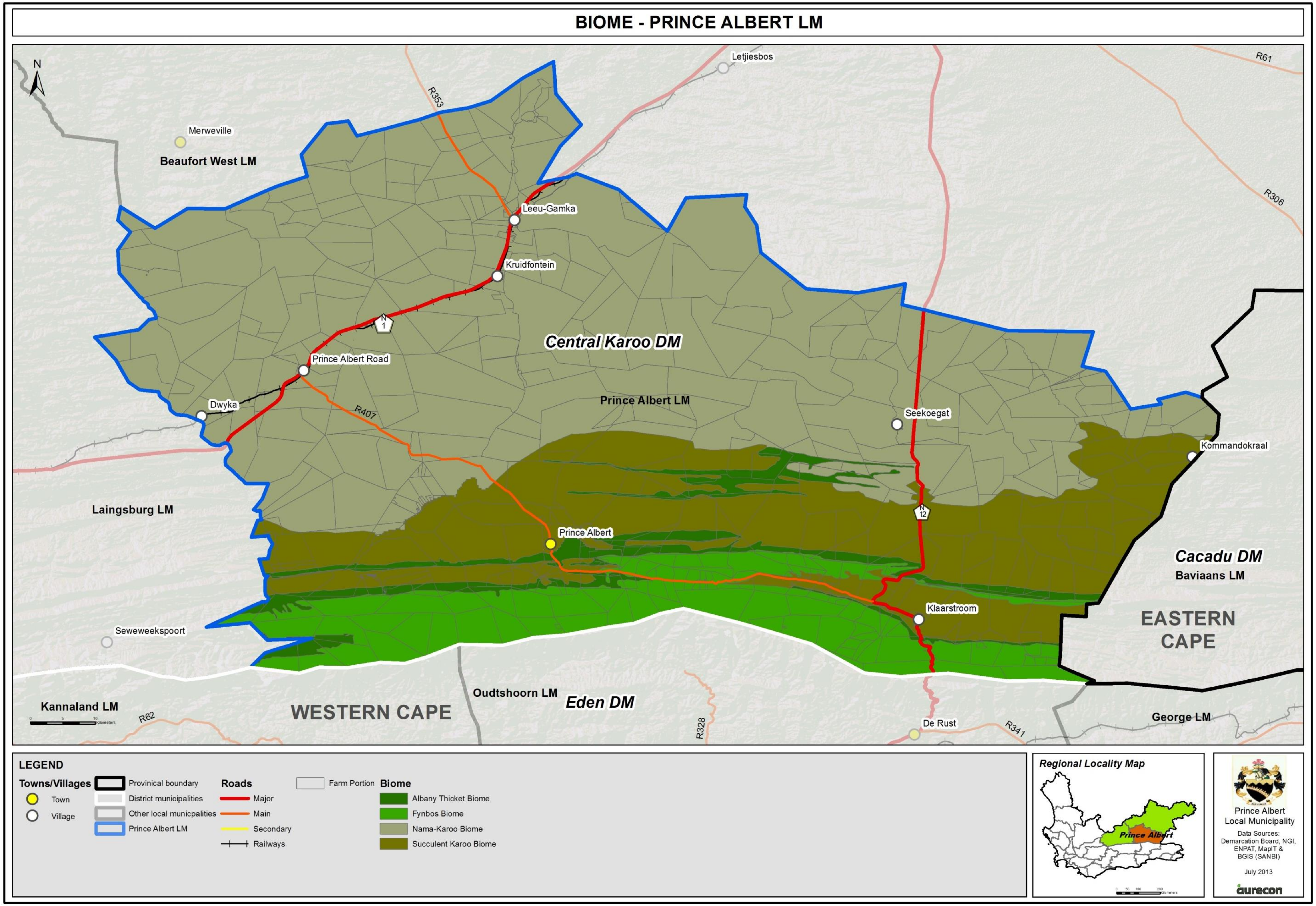
6.2.3.7.1 Vegetation[64]

Map 15 shows the vegetation types found within the borders of Prince Albert Local Municipality. The main vegetation type is Gamka Karoo followed by the Succulent Karoo.

In the pristine condition of Gamka Karoo, dense stands of spekboom occur, often with Euclea undulate, Gloveria integrifolia, Pappea capensis and Rhus glauca. Shrubs are also abundant, stem- and leaf-succulents are often prominent, and the grass component is poorly developed, with Cenchrus ciliaris, Ehrharta calycina, Eragrostis plana and Sporobolus fimbriatus occasionally abundant after good rain.

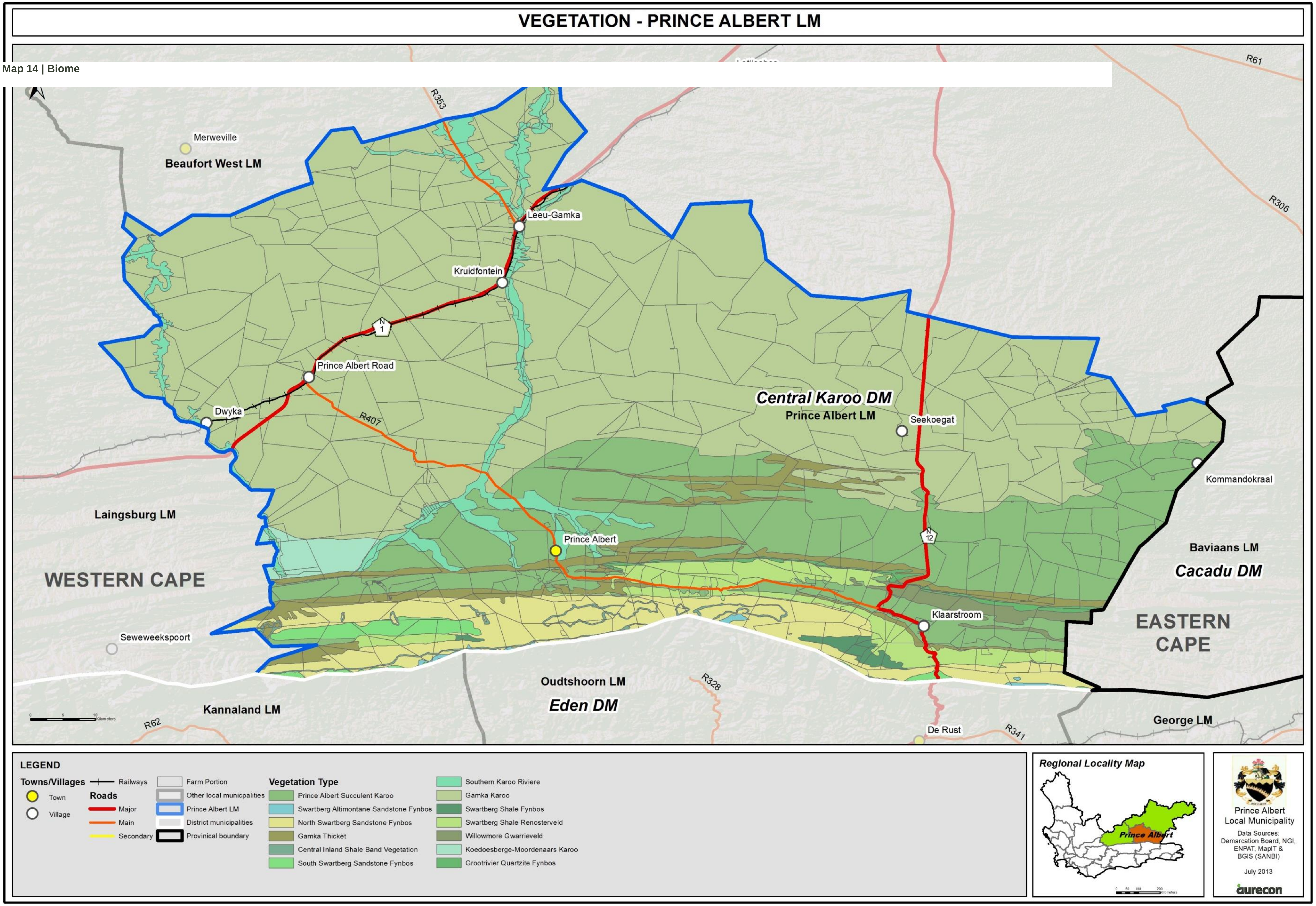
The Swartberg mountain range is covered by south and north Swartberg Sandstone Fynbos and Shale Fynbos. Furthermore traces of Koedoesberge-Moordenaars Karoo and Gamka Thicket vegetation types are found.

[64] Mucina, L., Rutherford, M. C. and Powrie, L. W. (eds) 2005. Vegetation map of South Africa, Lesotho and Swaziland, 1:1 000 000 scale sheet maps. South African National Biodiversity Institute, Pretoria.



BIOME - PRINCE ALBERT LM
N
Merweville
Beaufort West LM
Letjiesbos
R61
R353
R306
Leeu-Gamka
Kruidfontein
N 1
Central Karoo DM
Prince Albert Road
Dwyka
R407
Prince Albert LM
Seekoegat
Kommandokraal
Laingsburg LM
N 12
Prince Albert
Cacadu DM
Baviaans LM
Klaarstroom
EASTERN CAPE
Seweweekspoort
Oudtshoorn LM
Eden DM
Kannaland LM
R62
WESTERN CAPE
R328
De Rust
R341
George LM
LEGEND
Towns/Villages
Town
Village
Provincial boundary
District municipalities
Other local municpalities
Prince Albert LM
Roads
Major
Main
Secondary
Railways
Farm Portion
Biome
Albany Thicket Biome
Fynbos Biome
Nama-Karoo Biome
Succulent Karoo Biome
Regional Locality Map
Prince Albert
Prince Albert Local Municipality
Data Sources: Demarcation Board, NGI, ENPAT, MapIT & BGIS (SANBI)
July 2013
aurecon

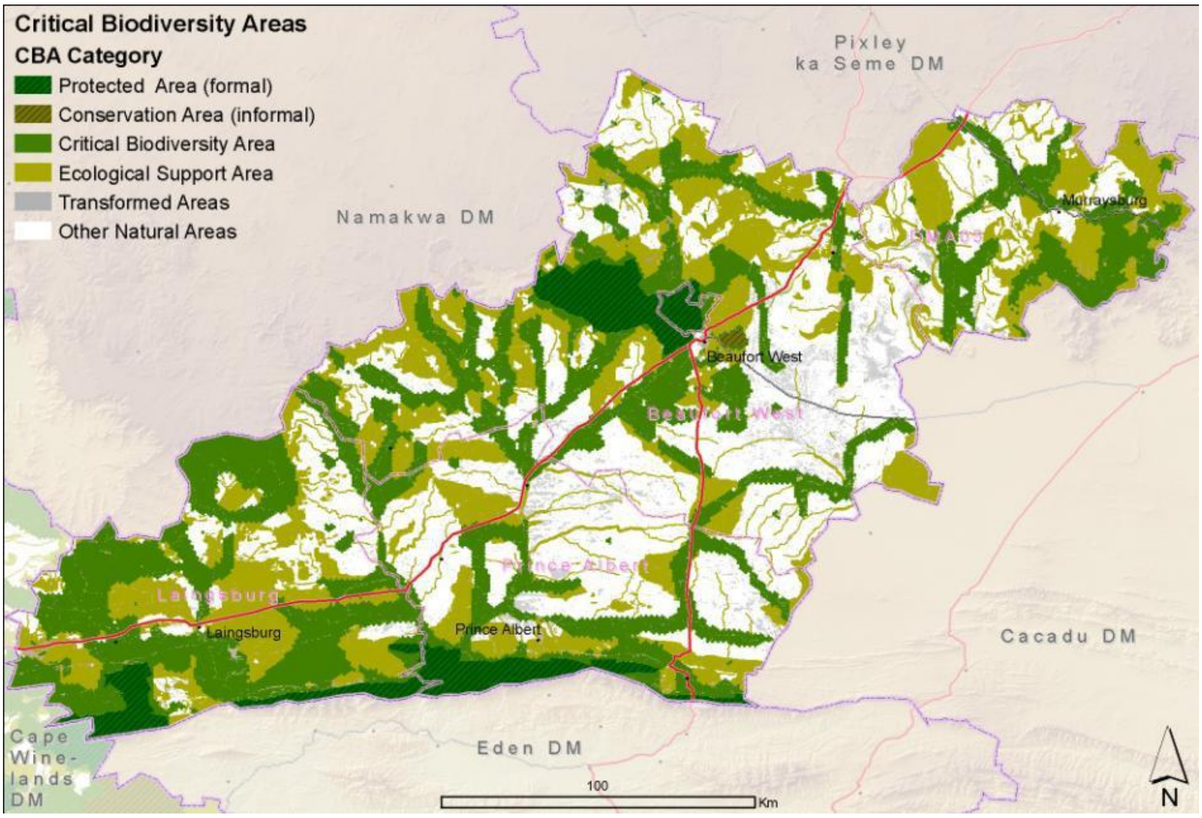
Map 14 | Biome



Map 15 | Vegetation

6.2.3.7.2 Critical Biodiversity Areas

Map 16 | Critical Biodiversity Areas – Central Karoo District Municipality[65]



In 2009 the Department of Environmental Affairs and Development Planning conducted a Biodiversity assessment of the Central Karoo District Municipality. During this assessment the CBA's indicated on **Map 16** above were identified and the management objective thereof as shown in **Table 5** below.

Table 5 | Desired Management Objective for identified CBA's

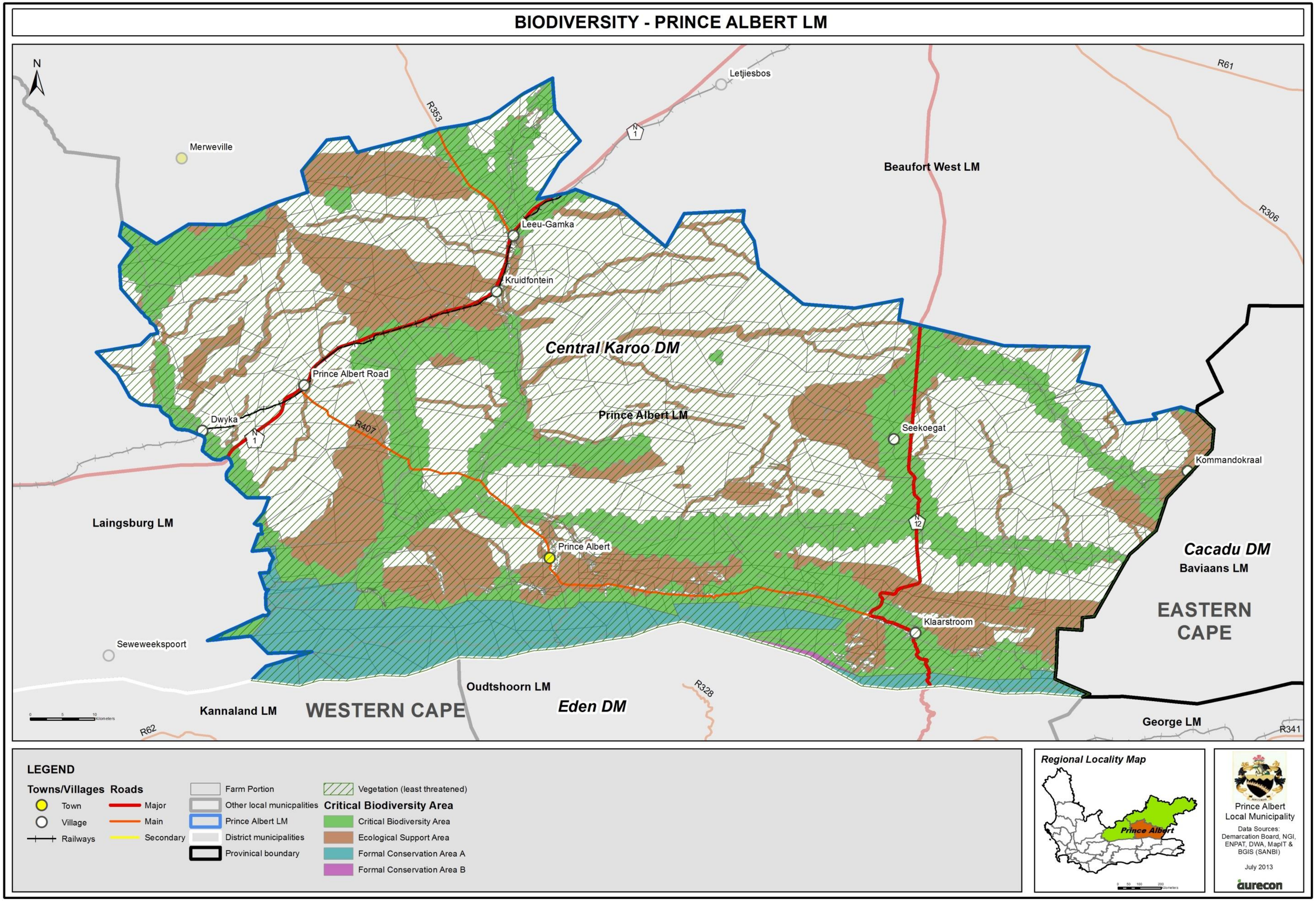
CBA Map Category:	Formal Protected Areas and Informal Conservation Areas	Critical Biodiversity Areas	Ecological Support Areas	Other Natural Areas	No Natural Areas Remaining
Desired Management Objective:	Maintain natural land. Rehabilitate degraded to natural or near natural and manage for no further degradation.		Maintain ecological processes	Sustainable Management within general rural land use principles	Favoured areas for development. Sustainable Management within general rural land use principles

[65] DEADP. 2009. Biodiversity Assessment of the Central Karoo District Municipality. 26 p.

Map 17 shows the critical biodiversity areas, the ecological support areas, the formal protected areas and the ecosystem status of Prince Albert Local Municipality.

Implications for Prince Albert Local Municipality:

- The main ecological threats of the Nama-Karoo Biome results from agriculture, spread of invasive plant and mining operations. It is thus important to protect the biome from the threats.
- The whole Prince Albert Local Municipality has a **least threatened** ecosystem status.
- The Core 1 Spatial Planning Category will be assigned to CBA's.



Map 17 | Biodiversity

6.2.3.8 Protected Areas[66]

The protected areas of Prince Albert Local Municipality are shown in **Map 18** below and can be described as follows:

Swartberg Nature Reserve lies between the Great Karoo and Klein Karoo, forming a narrow but long stretch of 121 000ha. The reserve was declared a World Heritage Site in 1997.

The Swartberg Mountains are part of the Cape fold mountain range, with geological formations common to the Table Mountain group and, to a lesser extent, the Bokkeveld and Cango groups. The Swartberg pass and Meiringspoort impressively show the rock formations from these groups.

Vegetation in the Swartberg is remarkably diverse, including Renosterveld, Mountain Fynbos, Karoo-veld, Spekboom Veld and numerous geophyte species. Some species bloom virtually throughout the year although most plants flower in spring. In early autumn, many protea species flower, attracting large numbers of sugarbirds and sunbirds. During mid-summer notable plants on the higher Swartberg peaks are in flower, including the rare Protea Venusta.

The Swartberg Nature Reserve is bordered by **Gamkapoort Nature Reserve** immediately to the north (8 000ha) and Towerkop Nature Reserve immediately to the west (51 000ha). These two reserves are managed in conjunction with Swartberg and they all form part of the Greater Swarberg Protected Area. All three nature reserves are critical to the management of **mountain catchments** and water yields in the region.

Mammals likely to be seen include klipspringer, grey rhebuck, kudu, baboon and dassie. Springbok occur on the flatter areas of Gamkapoort. Leopard and caracal are also present in the area, but seldom seen. More than 130 bird species have been recorded here, notably, black, fish and martial eagle species, Cape sugarbird and the pied kingfisher.

The Cultural Historical Site named **Gamkaskloof (Die Hel)** has a rich ecological, archaeological and cultural history. It was declared a Cultural Historical Site and deserves special care to ensure it is preserved for future generations. Gamkaskloof was first inhabited by farmers in 1830 and accessible only by foot until 1962 when a road was finally built.

Biodiversity Stewardship Sites

As most of the Western Cape's biodiversity is in private ownership, CapeNature initiated the Biodiversity Stewardship programme in 2003. This programme facilitates conservation on privately owned land by setting up agreements between the landowners and CapeNature.

The landowners undertake to protect and manage their properties or parts thereof according to sound conservation management principles. CapeNature undertakes to support this management by providing advice, management plans and assistance in planning invasive alien species clearing and fire management schedules. It also allows for the private landowner to benefit more from the biodiversity through ecologically sensitive income-generating avenues.[67]

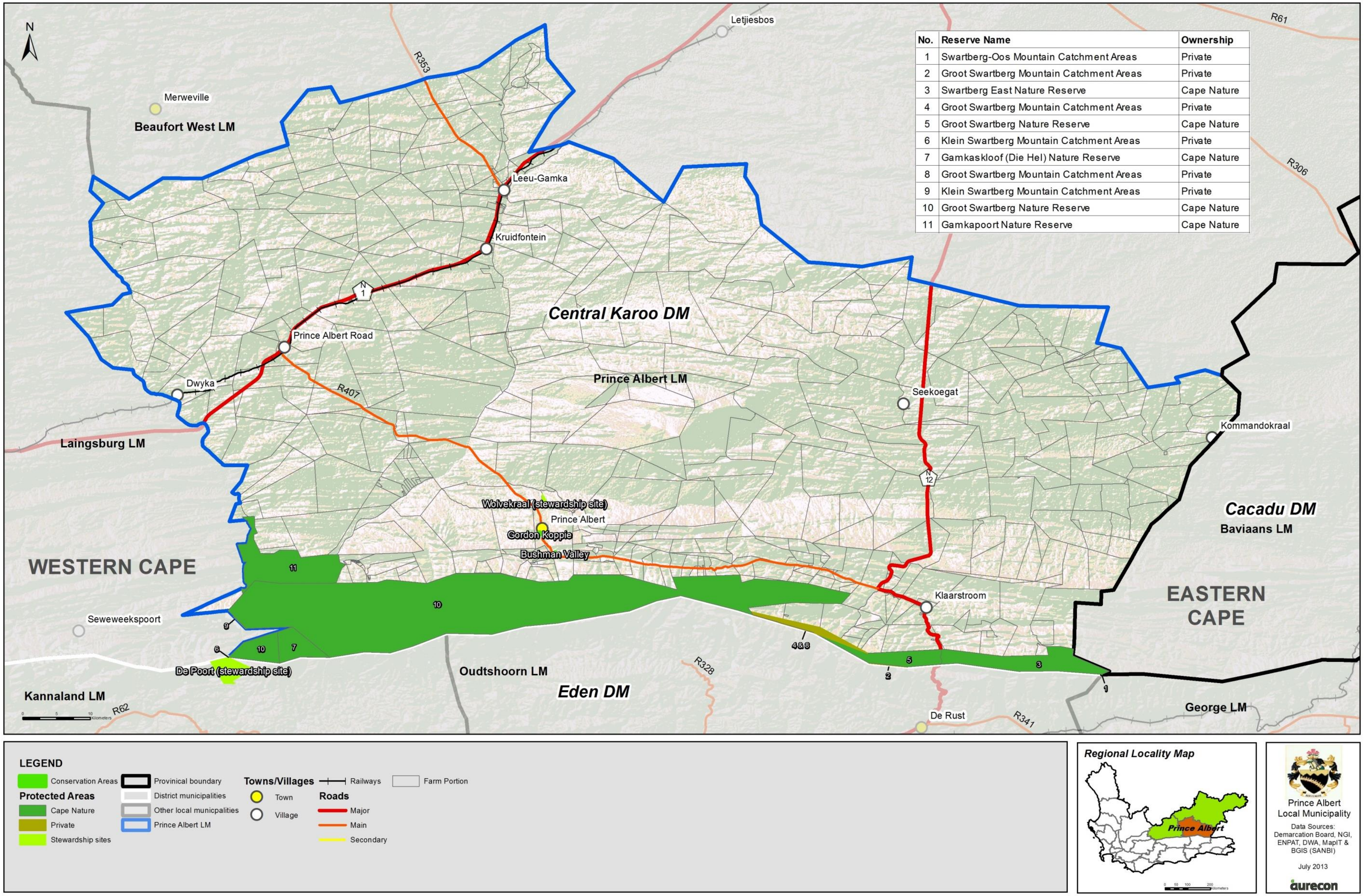
[66] CAPENATURE. 2013. Swartberg Nature Reserve. http://www.capenature.co.za/. Date of access: 04 June 2013
[67] CAPENATURE. 2013. Stewardship. http://www.capenature.co.za/projects.htm?sm%5Bp1%5D%5Bcategory%5D=444. Date of access: 17 July 2013

Wolwekraal (Part 2 of Farm 211) is currently the only Biodiversity Stewardship Site within Prince Albert Local Municipality. The Protected Area Management Agreement was signed with CapeNature in June 2011 and its awaiting declaration under the National Environmental Management: Protected Areas Act 2003.

The owners of Wolwekraal have signed a management agreement with CapeNature, the Provincial Nature Conservation Authority. The agreement is that the property be managed for conservation of biodiversity. No housing development, industry, livestock keeping or introduction of non-indigenous game is permitted, except on the 9 ha set aside as a nursery. Invasive alien plant species such as pink tamarix have to be removed, the fences maintained and erosion controlled. Permitted land use includes research and educational uses, nature walks and bird watching.[68] The nature reserve is binding on successors in title who are bound to maintaining the status of the property as a nature reserve.

[68] PRINCE ALBERT VRIEND. 2012. Wolwekraal Nature Reserve – honouring our heritage, inspiring our youth. Article Published in Prince Albert Vriend Issue 182, p 31 (April 2012)

CONSERVATION AND PROTECTED AREAS - PRINCE ALBERT LM



No.	Reserve Name	Ownership
1	Swartberg-Oos Mountain Catchment Areas	Private
2	Groot Swartberg Mountain Catchment Areas	Private
3	Swartberg East Nature Reserve	Cape Nature
4	Groot Swartberg Mountain Catchment Areas	Private
5	Groot Swartberg Nature Reserve	Cape Nature
6	Klein Swartberg Mountain Catchment Areas	Private
7	Gamkaskloof (Die Hel) Nature Reserve	Cape Nature
8	Groot Swartberg Mountain Catchment Areas	Private
9	Klein Swartberg Mountain Catchment Areas	Private
10	Groot Swartberg Nature Reserve	Cape Nature
11	Gamkapoort Nature Reserve	Cape Nature

Map 18 | Protected Areas

6.3 Socio-Economic Environment

6.3.1 History and Heritage

The majority of the information presented in this section was provided by the Prince Albert Cultural Foundation (PACF), which is a registered conservation body with Heritage Western Cape. The information was sourced from the following documentation:

- Prince Albert Heritage Inventory (2009-2011)
- Land Use Policy Principles aimed at the Protection of the Heritage Landscape (2013)

None of the listed documents are formally adopted by council, but it should be noted that the Prince Albert Heritage Inventory is funded by Prince Albert Local Municipality and approved by Heritage Western Cape.

Additionally the following sources were consulted:

- The established website of the Prince Albert Tourism Association
- The Cape Town Heritage Trust website

6.3.1.1 Prince Albert

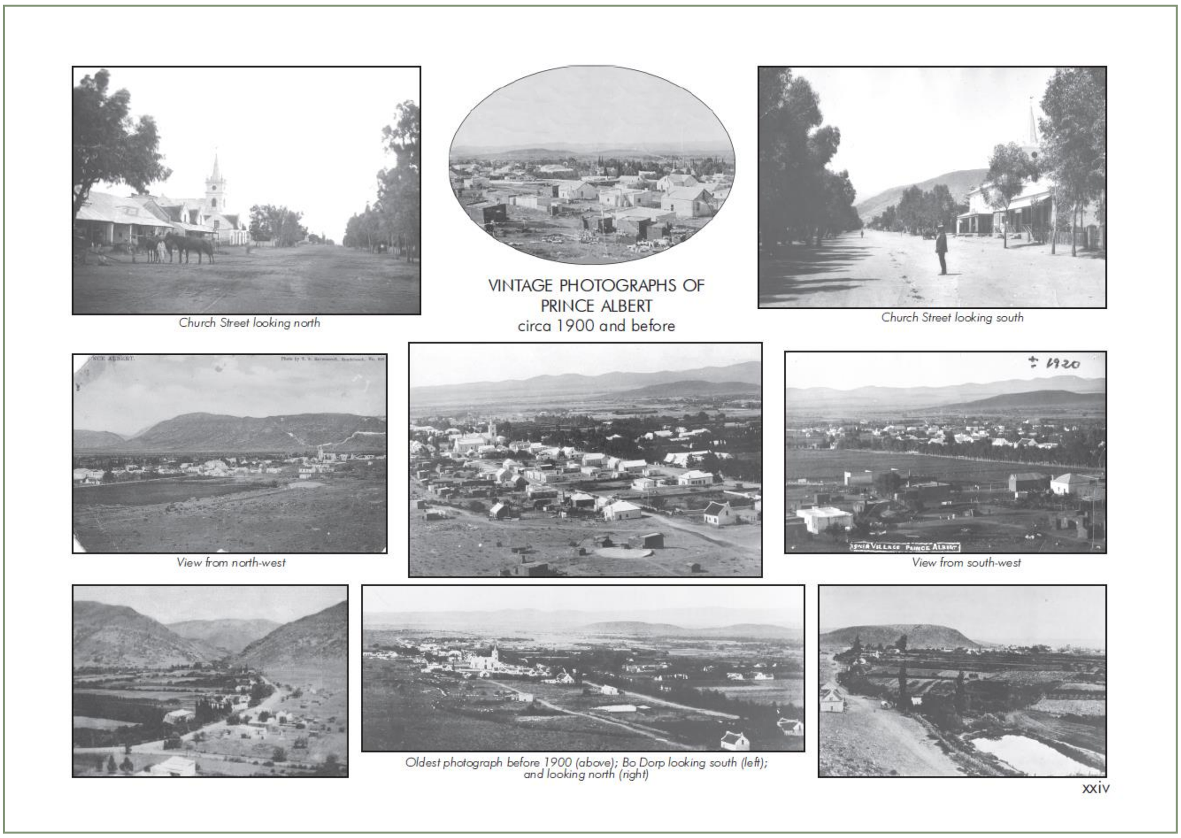


Figure 20 | Vintage Photographs of Prince Albert circa 1900 and before (Source: Prince Albert Heritage Inventory 2009-2011)

The village of Prince Albert sprang from the loan farm Queekvalleij, established by Zacharias and Dina de Beer in 1762. The fertile valley soon attracted other farmers, church services were held on the market square and by 1840 an NG church had been built and a thriving community established. **Figure 20** above shows vintage photographs of Prince Albert circa 1900 and before.

In 1845 some parishioners suggested that the village be named Albertsburg after "Naar zijne Hoogheid" - his Royal Highness, Prince Albert, Queen Victoria's consort. The Governor's approval was granted in July and the village became known as Prince Albert.[69]

There are 13 proclaimed monuments situated within Prince Albert. **Figure 21 and 22** below indicate the locality of these monuments within Prince Albert and a picture of each monument.

Figure 21 | Locality of Monuments (Source: Prince Albert Heritage Inventory 2009-2011)

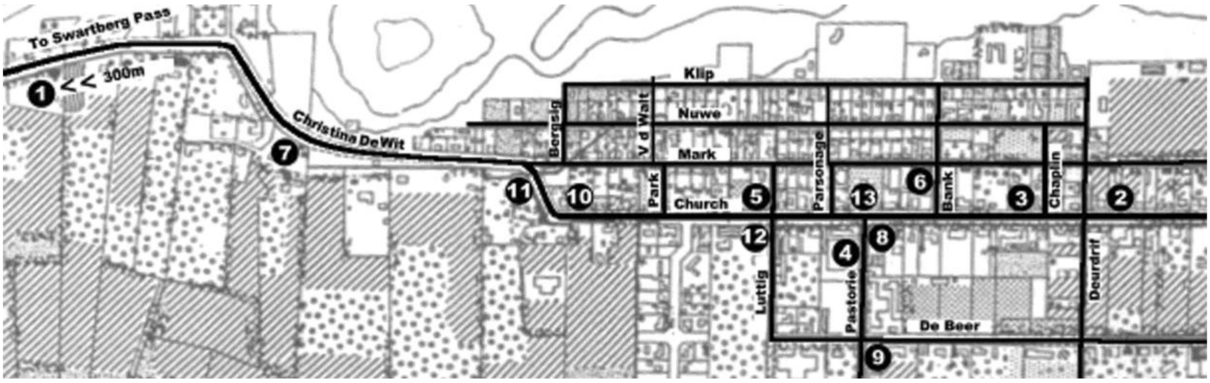
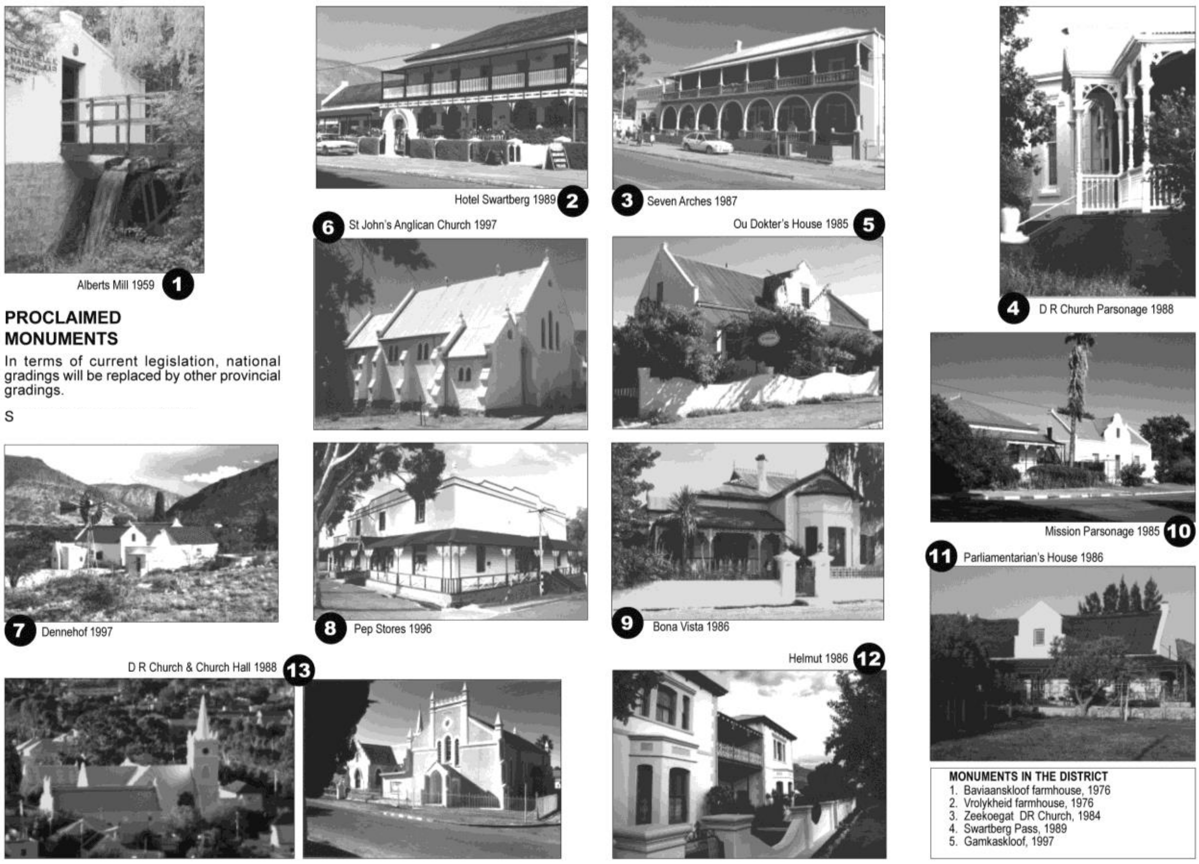


Figure 22 | Prince Albert Monuments (Source: Prince Albert Heritage Inventory 2009-2011)



[69] **PRINCE ALBERT TOURISM ASSOCIATION. 2013. Prince Albert history of the area. http://www.patourism.co.za/history.htm. Date of access: 23 May 2013**

The PACF divided Prince Albert into different heritage significant sectors. Furthermore the PACF prepared a matrix linking the current zoning scheme with recommendations for various land uses in each heritage significant sectors. The main aim of the exercise was the protection of the heritage landscape. The heritage sectors are indicated on **Map 19** and described below[70]:

- A - Church Street and all erven east and west with very significant buildings and street frontages: Linear character with diversity of land uses: Agriculture, Residential, Business and Institutional.
- B - Very significant heritage farmhouses and out-buildings on prime farmlands along De Beer and Pastories Street
- C - Very significant serial grouping of Victorian and Edwardian dwellings in Nuwe Street
- D - Very significant serial grouping of Victorian and Edwardian dwellings in Mark Street
- E - Very significant town centre heritage farm buildings and farmlands bounded by Church, De Beer, Leeb & Deurdrif Streets
- F - Various significant heritage buildings along Meiring & M. Prinsloo Street Cottages on smallholdings along Van Dyk and Jordaan Streets
- G - Various heritage buildings on extensive prime farmlands bounded by Dorps river in the east
- H - Very significant heritage farmhouses on prime farmland with heritage cottages on periphery
- I - Bo-Dorp: Very significant heritage farmhouses on prime farmland and cottages on small-holdings
- J - Robert Gordon Koppie – A botanically natural backdrop to the town, which needs proper legal protection.
- K - Undeveloped erven with some heritage buildings

Adding to the above the Prince Albert Heritage Inventory 2009-2011 divided the heritage of Prince Albert into five pillars, namely:

1. Landscape

The backdrop of the Oudekloof Mountains and Swartberg range determined the history and character of Prince Albert to a major extent.

2. The Cultural Landscape

The cultural landscape of Prince Albert from the time of settlement up to the present day has been determined largely by sensible allocation of land. The village has developed on the dwyka tillite substrate and up to the edge of the paleo-terrace. The agricultural component occurs in the alluvial plain of the Dorps River which has generally been conserved for farming activity. A special sense of place arises from the interrelationship between the built environment and the agricultural component, the farmland, the mountains and the wide open Karoo plains.

3. The Water Furrow System

Perennial water led from the mountain catchment is the lifeblood of the town and was present as far back as the 1770's, see the map above.

[70] **PRINCE ALBERT CULTURAL FOUNDATION. 2013. Land Use Policy Princples Aimed At The Protection Of The Heritage Landscape. page number unknown**

4. The Built Environment

The town is virtually a living museum of Cape rural architecture, with the different styles existing side by side and reflecting consecutive stages of the town's development. The town's rich architecture includes the following buildings:

- Gabled buildings (c1840-1860)
- Cape Cottage (1762-c1900)
- Karoostyle (1762-1950s)
- Double-storey parapeted houses
- Victorian villas, both single- and double-storey (c1890-1914)
- Victorian Cottage (1890-1910)
- Edwardian Bungalow (1902-1914), etc.

Each of the heritage significant buildings in Prince Albert is graded according to the Heritage Western Cape format with some minor adjustments to accommodate the unique nature of Prince Albert.

5. Historical Plantings

Historic hedges, traditional gardens, and old trees, many of which are older than 125 years, for example the eucalyptus gum trees of Church Street, reflect the age of the town. **Figure 23 to 25** shows the historical plantings and **Map 19** below their specific location within Prince Albert.



Figure 23 | Mature cypresses - Perdedraai



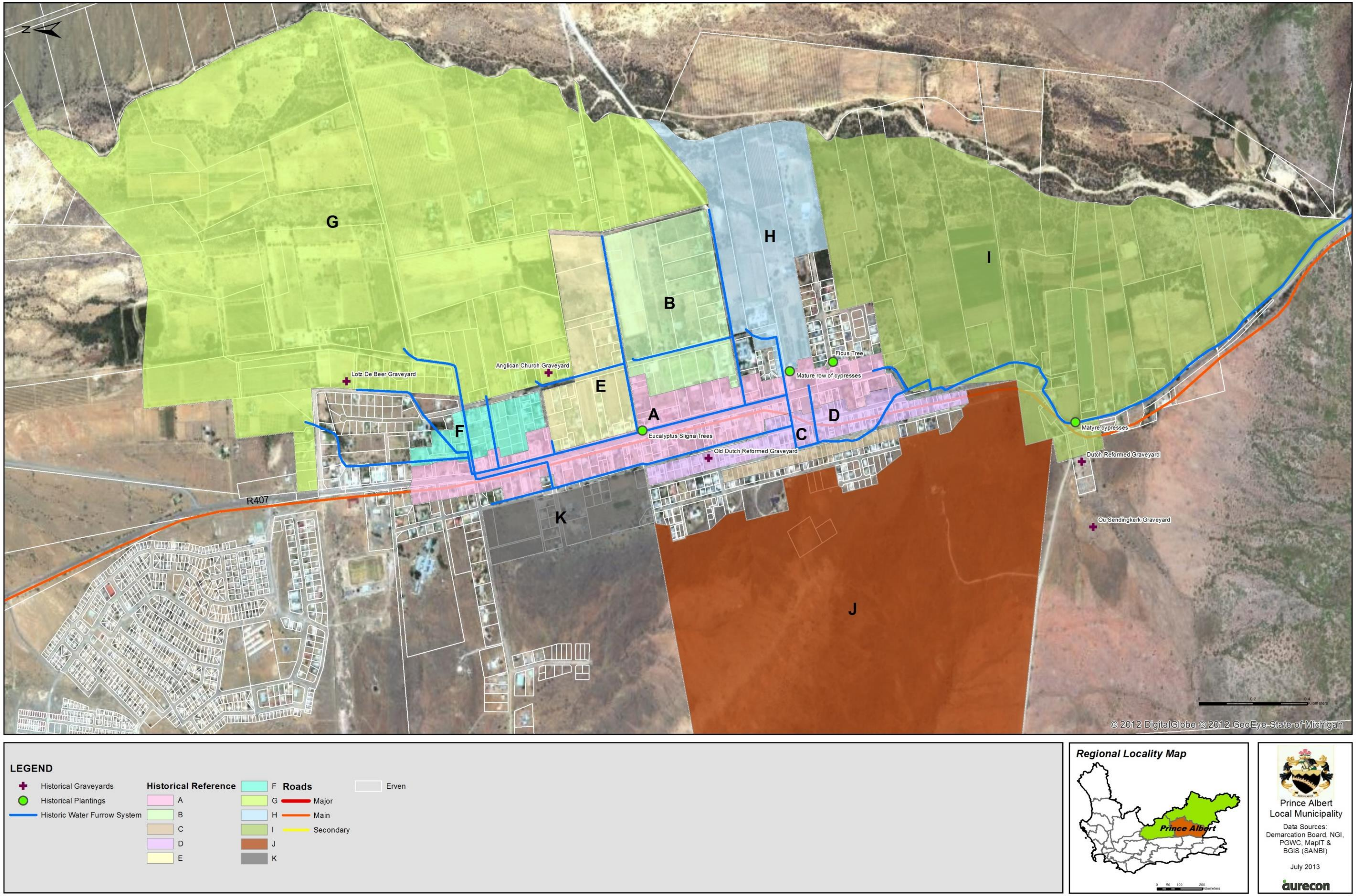
Figure 24 | Ficus tree in Jan Louw Street



Figure 25 | Eucalyptus Saligna trees in Church Street

There are also various historic graveyards in and around Prince Albert which are indicated on **Map 19.**

HISTORY AND HERITAGE - PRINCE ALBERT



Map 19 | Prince Albert History and Heritage

6.3.1.2 Leeu Gamka “Where the Cape lion once roamed”[71]

Leeu Gamka was first named Bitter Water by road builders Thomas and Andrew Geddes Bain because of its hydrogenous, brack or "kruid" water. It was one of the few outspans on the long route north with drinkable water. The travellers all camped near a grove of indigenous sweet thorn trees where the Leeu and Gamka rivers meet. It was cool and there was grazing. But it was far from idyllic, constant watch had to be kept for wild animals and roaming bands of /Xam San, also in search of food and water.

It was officially named Fraserburg Road when the railway line arrived there. When the rail came in 1879, stone station buildings, railway single quarters and a hotel were built. The final shift in the naming came in 1950 when Leeu Gamka was adopted, named after both rivers, the Leeu and the Gamka.

The bitter, flat-tasting water is caused by seepage of salts, mineral and trace elements into underground sources. The water also has an unpleasant sulphurous odour and is unsuitable for stock. Yet, these minerals and trace elements have led to Leeu Gamka now producing what is claimed to be the best Lucerne available in South Africa. First introduced in 1870 as a feed for ostriches, lucerne is now grown under irrigation.

Early travellers often wrote of lions. In 1776 Swellengrebel reported finding the body of a //Xam San woman mauled to death here by a lion. By 1803 German explorer Heinrich Lichtenstein mentions three lion species and the Cape lion as "most magnificent". George Thompson camped here in 1823 on his way to Beaufort and mentions having to build a huge fire "to keep off lions which infest this path." On his way through here in 1839, the old Quaker gospel preacher and explorer, James Backhouse, also took precautions against lions. The Cape lion is now extinct. The settlement's first church and school were built in 1896. And, in 1898, Gert Maxwell Coetzee hired a morgen of ground from the Prince Albert Divisional Council to build a small wood and iron hotel near the old Bitter Water outspan spot. When the Anglo Boer War broke out in 1899, troop trains and wounded soldiers almost immediately began passing through Leeu Gamka. The hotel and the railwaymen's single quarters, the picturesque little stone cottages still standing next to the railway line, were used as a hospital and convalescent wing.

[71] **CAPE TOWN HERITAGE TRUST. 2013. The Great Karoo: Leeu Gamka. http://www.heritage.org.za/karoo/leeu.htm. Date of access: 21 May 2013**



Figure 26 | Blockhouse[72]



Figure 27 | Railway Building



Figure 28 | Dutch Reformed Church - 1922



Figure 29 | Dutch Reform Mission Church

In 1901, the British forces built a blockhouse on the banks of the Leeu River. Its purpose was to Guard the railway line and the bridge over the river. The ruins of this stone blockhouse can be seen on **Figure 26**. Over the years its roof, ladders, floors and door have vanished.

In 1903 houses were planned near the hotel, owner Gert Maxwell Coetzee refused to have dwellings encroaching on the morgen of ground granted to him. As a result all houses in Leeu Gamka had to be built on the other side of the railway line.

There are some buildings of architectural interest in the village, among these are the dressed stone railway buildings, the tiny post office, the original Dutch Reformed Church and the Dutch Reformed Mission Church, see **Figure 27 to 29**. The Leeu Gamka hotel, built in 1898 and revamped in 1910, has a collection of bar items, including early cooldrink samples. Also on display is old farming implements, sewing machines and lamps, as well as a fossilised elephant tusk found in the Gamka River bed in 1938. It is thought to be about 900 years old.

[72] MAGUIRE, THOMAS, MARINCOWITZ & BOTHA. 2005. A visit to Leeu Gamka. p. 3-6

6.3.1.3 Klaarstroom



Figure 30 | Klaarstroom[73]

Klaarstroom is a petite village situated at the bottom of the Swartberg Mountains. A novel Victorian working farm village, it has been hardly touched by the changes of time in South Africa, see **Figure 30** above.

Klaarstroom means "clear stream". At one time it was utilized as a place for farmers from the Karoo. These farmers were on their way to Mossel Bay to cleanse their valuable cargo of wool in the clear mountain streams of Klaarstroom. This wool washing ritual has since disappeared but the village is still serene and peaceful.[74]

[73] PRINCE ALBERT TOURISM ASSOCIATION. 2013. Leeu Gamka a hamlet in the Prince Albert municipal district. http://www.patourism.co.za/klaarstroom.htm. Date of access: 23 May 2013
[74] SA STAY. 2010. In and around Klaarstroom. http://www.sastay.co.za/blog/in-and-around-klaarstroom. Date of access: 23 May 2013

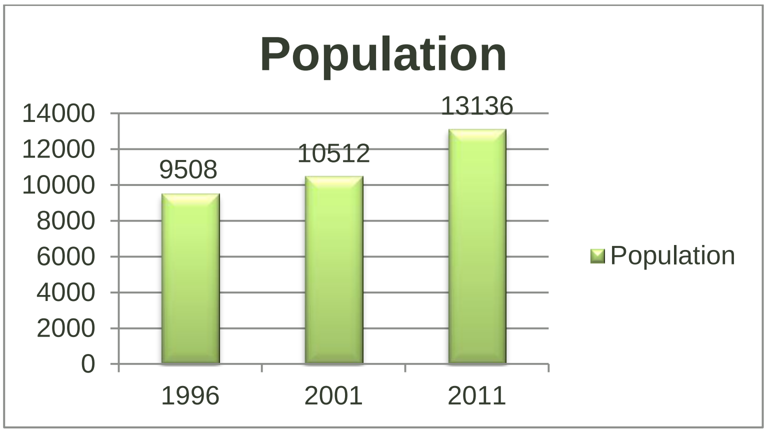
6.3.2 Demographic Profile

6.3.2.1 Population

According to the 2011 census figures, the Western Cape has a population of approximately 5.8 million people (11% of the South African population), remaining one of the Provinces with the largest share of the South African population.

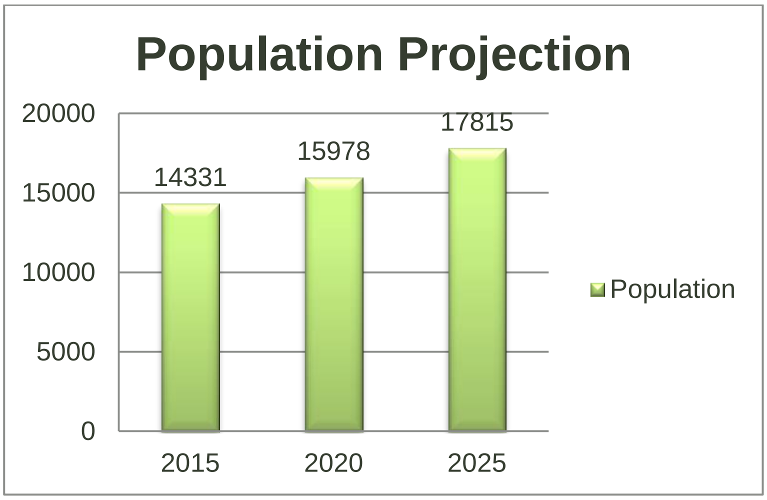
The Prince Albert Municipal Area had a total population of approximately 10 512 persons in 2001 and 13 136 in 2011, the majority of which resided in the Prince Albert town area. The total population of Prince Albert Local Municipality increased with 2 624 persons over the 10 years from 2001 to 2011, as shown on **Figure 31** below. **Map 20** below gives a spatial indication of the population distribution within Prince Albert Local Municipality.

Figure 31 | Prince Albert Local Municipality - Population[75]



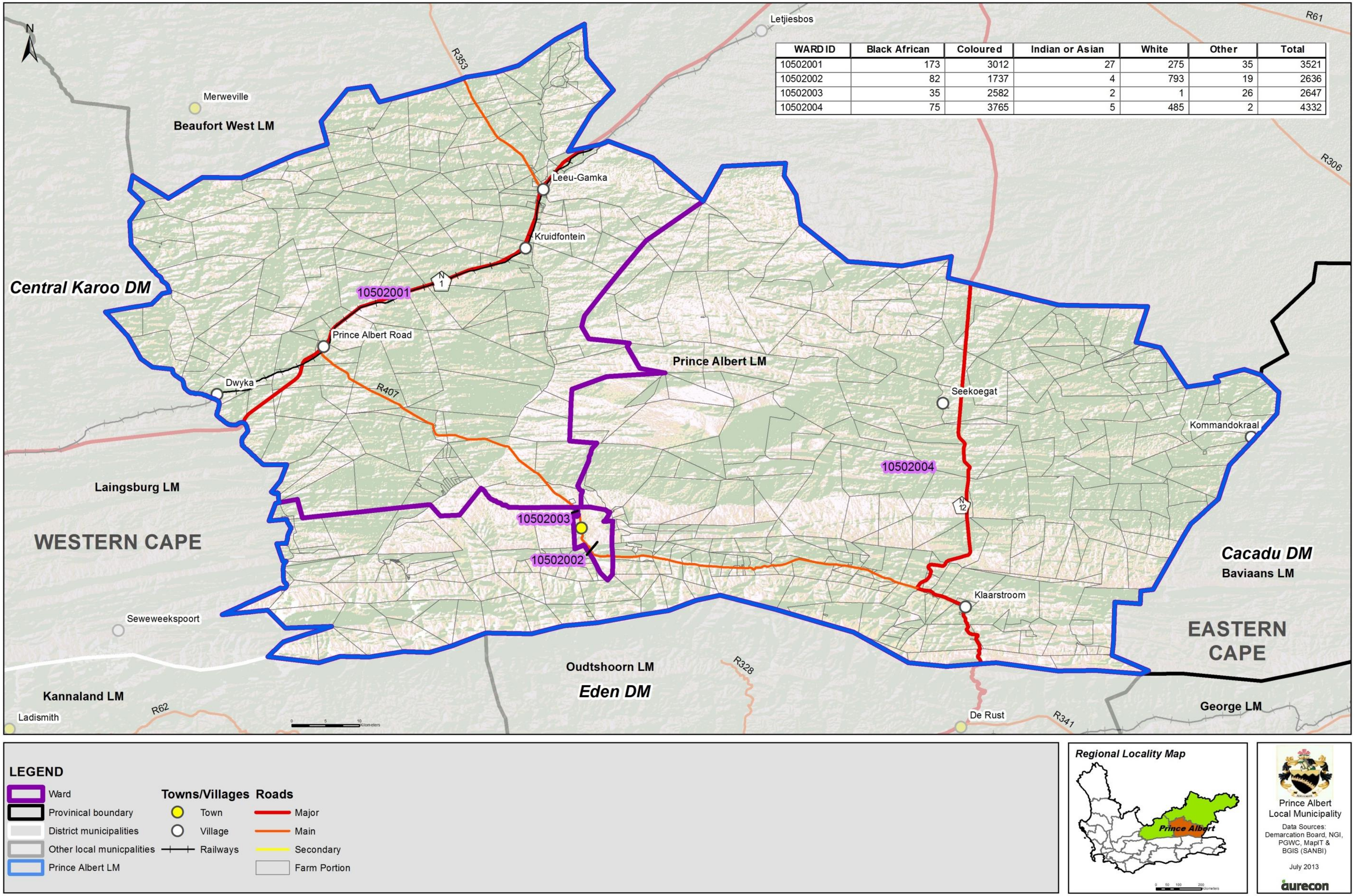
The Stats SA data indicates an annual growth of 2.2% between 2001 and 2011. Based on this positive growth rate, it is projected that the population will increase to 17 815 in 2025, see **Figure 32** below.

Figure 32 | Prince Albert Local Municipality - Population Projection[76]



[75] Stats SA: Census 2011
[76] Stats SA: Census 2011

POPULATION DISTRIBUTION - PRINCE ALBERT LM



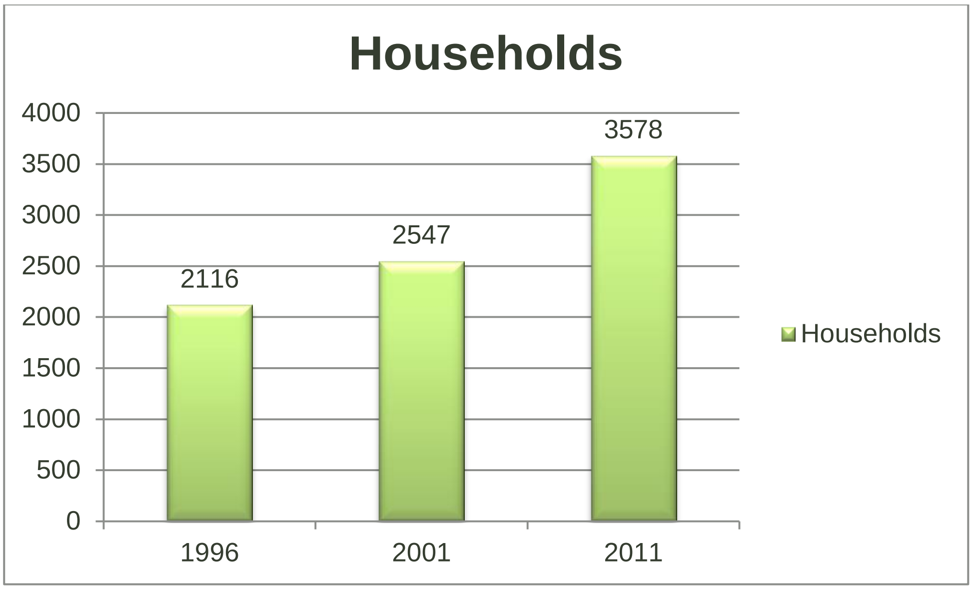
WARD ID	Black African	Coloured	Indian or Asian	White	Other	Total
10502001	173	3012	27	275	35	3521
10502002	82	1737	4	793	19	2636
10502003	35	2582	2	1	26	2647
10502004	75	3765	5	485	2	4332

Map 20 | Population Distribution

6.3.2.2 Households

According to **Figure 33** below, there was an increase of 1 031 households over 10 years from 2001 to 2011. In many instances, the size of the settlements is increasing with the formation of new households.

Figure 33 | Prince Albert Local Municipality - Number of Households[77]



The average household size in Prince Albert Local Municipality decreased from 3.9 persons in 2001 to 3.6 persons per household in 2011, as indicated in **Table 6** below.

Table 6 | Household Sizes[78]

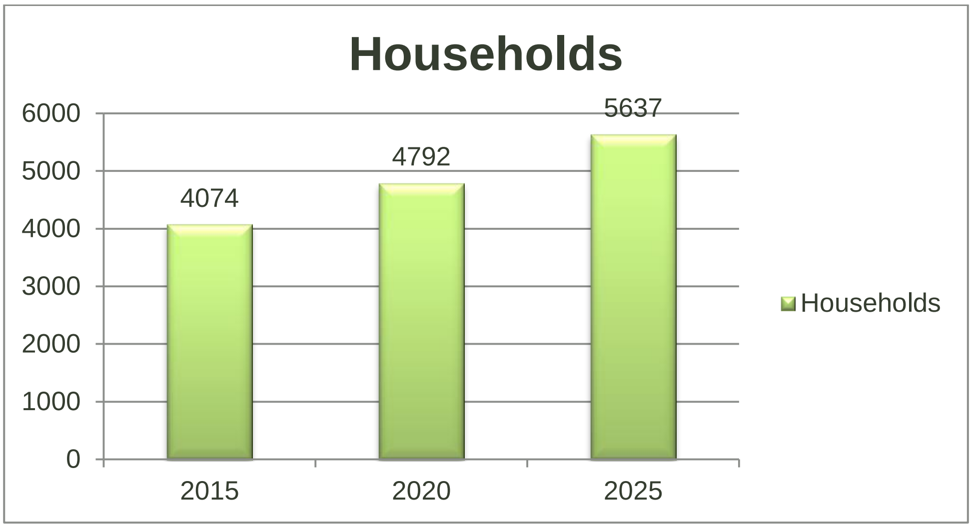
Household Sizes	
1996	4.2
2001	3.9
2011	3.6

The Stats SA data indicates a 3.3% annual growth rate for the total number of households from 2001 to 2011. Based on this growth rate, it is projected that the number of households will increase to 5637 in 2025, see **Figure 34** below.

When comparing the population growth rates with the household growth rates, the household growth rate is much higher than the population growth rate which is contradicting. An explanation could be that the household sizes reduced from 2001 to 2011, thus leading to an increase in the number of households.

[77] Stats SA: Census 2011
[78] Stats SA: Census 2011

Figure 34 | Prince Albert Local Municipality - Household Projection[79]



6.3.2.3 Land required for Future Developments

The household growth up until 2030 should be projected in order to get a sense of the future housing need and the resultant land requirements. The tables below seek to illustrate what the projected populations, household numbers and resultant land requirements are for each settlement by 2030, assuming an average future growth rate of 2.2% per annum, an average of 3.6 people per household and that all future residential developments will be provided at a density of 25 dwelling units per hectare. **Table 7** illustrates the population projections for each settlement based on a 2.2% growth rate per annum.

Table 7 | Settlement Scale: Population Projections

Settlement	Population (2001)	Population (2011)	Projected Population 2015	Projected Population 2020	Projected Population 2025	Projected Population 2030
Prince Albert	5646	7055	7713	8622	9638	10774
Bitterwater	1698	2122	2320	2594	2900	3242
Leeu Gamka	483	604	660	738	825	922
Klaarstroom	467	584	638	713	797	891
Prince Albert Non-Urban (NU)	2218	2772	3030	3387	3786	4232
Total	**10512**	**13137**	**14361**	**16054**	**17946**	**20061**

[79] **Stats SA: Census 2011**

Table 8 below shows se predicted number of household for 2030 based on the assumption that there were 3.9 people per household in 2001 and that there were 3.6 people per household in the years thereafter.

Table 8 | Settlement Scale: Predicted Number of Households

Settlement	No. of households (2001)	No. of households i(2011)	No. of households (2015)	No. of households (2020)	No. of households (2025)	No. of households (2030)
Prince Albert	1448	1960	2143	2395	2677	2993
Bitterwater	435	589	644	721	806	901
Leeu Gamka	124	168	183	205	229	256
Klaarstroom	120	162	177	198	221	248
Prince Albert Non-Urban (NU)	569	770	842	941	1052	1176
TOTAL		**3649**	**3989**	**4459**	**4985**	**5573**

Table 9 below shows the projected future land requirements for new housing developments, assuming a future gross dwelling unit density of 25du/ha.

Table 9 | Settlement Scale: Land Requirements

Settlement	New households between 2011 - 2020	Land required by 2020 (ha)	No. of households (2025)	Land Required by 2025 (ha)	New households between 2011 - 2030	Land Required by 2030 (ha)
Prince Albert	435	17.4	717	28.68	1033	**41.32**
Bitterwater	132	5.28	217	8.68	312	**12.48**
Leeu Gamka	37	1.48	61	2.44	88	**3.52**
Klaarstroom	36	1.44	59	2.36	86	**3.44**
Prince Albert Non-Urban (NU)	171	6.84	282	11.28	406	**16.24**

Implications for Prince Albert Local Municipality:

Suitable land will be identify for the following land required for future residential developments: Prince Albert: 41.32 ha, Klaarstroom: 3.44 ha, Bitterwater & Leeu Gamka: 16ha

6.3.2.4 Population Composition Structure

Table 10 | Population composition of Prince Albert Local Municipality[80]

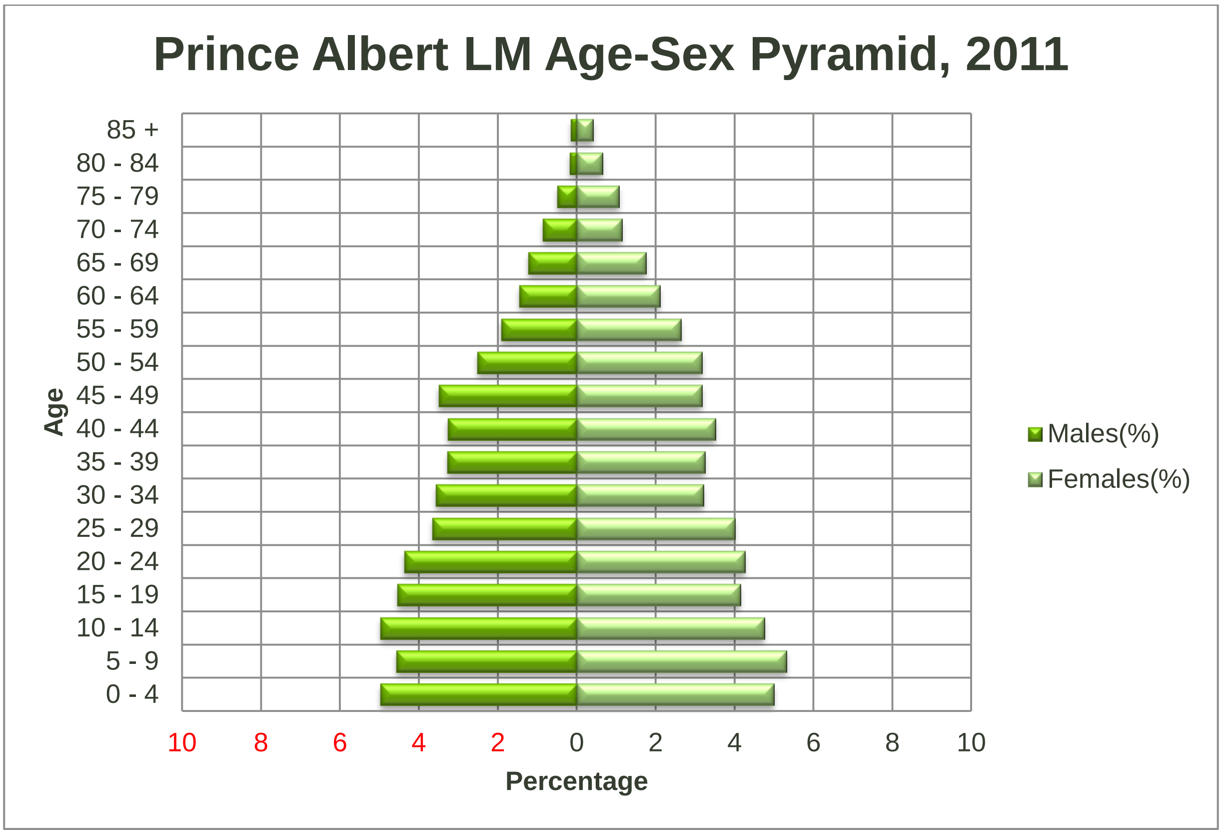
Prince Albert Local Municipality							
		1996		2001		2011	
Race	Sex	Population	Combined and percentage of total	Population	Combined and percentage of total	Population	Combined and percentage of total
Black	Male	61	99 (1.04%)	90	172 (1.64%)	227	365 (2.79%)
	Female	38		82		138	
Coloured	Male	3 918	8 073 (85.07%)	4 555	9 137 (86.92%)	5 418	11 096 (84.47%)
	Female	4 155		4 582		5 678	
Indian /Asian	Male	5	12 (0.13%)	6	11 (0.10%)	21	38 (0.29%)
	Female	7		6		18	
White	Male	641	1 306 (13.76%)	586	1 192 (11.34%)	761	1555 (11.84%)
	Female	665		606		794	
Other	Male	0	0 (0%)	0	0 (0%)	70	82 (0.62%)
	Female	0		0		12	
Total	Male	4 625 (48.74%)	9 490	5 237 (49.81%)	10 512	6 496 (49.45%)	13 136
	Female	4 865 (51.26%)		5 276 (50.19%)		6 640 (50.55%)	

Changes in population composition from 2001 to 2011	
Black	1.15%
Coloured	-2.45%
Indian/Asian	0.19%
White	0.50%
Other	0.62%

[80] Stats SA: Census 2011

Table 10 above summarizes the Stats SA Census, 2001 and 2011 data with regard to the population race and sex composition of Prince Albert Local Municipality. It is evident that the majority ethnic group in Prince Albert Local Municipality, according to SA Census 2011, is the coloured population, representing 84.47% of the entire population. The largest net decrease took place amongst the coloured population and the largest net increase amongst the black population.

Figure 35 | Age-Sex Pyramid of the Prince Albert Local Municipality[81]



On **Figure 35** above it can be seen that it's shaped like a pyramid indicating a developing municipality with high birth rates. A sharp decrease in the population numbers are visible between the 14 year old and the 44 year old age groups which could be due to lower birth rates during those years or higher mortality rates in those age groups.

Table 11 | Age Distribution[82]

	0-19		20-59		60+	
	2001	2011	2001	2011	2001	2011
Males	44%	39%	48%	53%	9%	9%
Females	41%	38%	49%	52%	10%	10%

The largest age group in Prince Albert Local Municipality is the age group 20-59 years. Furthermore it can be seen in **Table 11** that the age group 0-19 decreased, while the age group 20-59 increased and the age group 60 years and older remained stagnant between 2001 and 2011.

[81] Stats SA: Census 2011
[82] Stats SA: Census 2011

6.3.2.5 Migration

The term permanent 'migration' refers to both internal, i.e. between Provinces within the Country, as well as international migration, indicating people moving to the country and a specific Province.

The Stats SA data 2011 indicates that the population in Prince Albert Local Municipality increased from 10 512 in 2001 to 13 136 in 2011, which is an overall 24.96% net increase over the 10 years. This may be due various reasons, but is also contributable to the migration patterns.

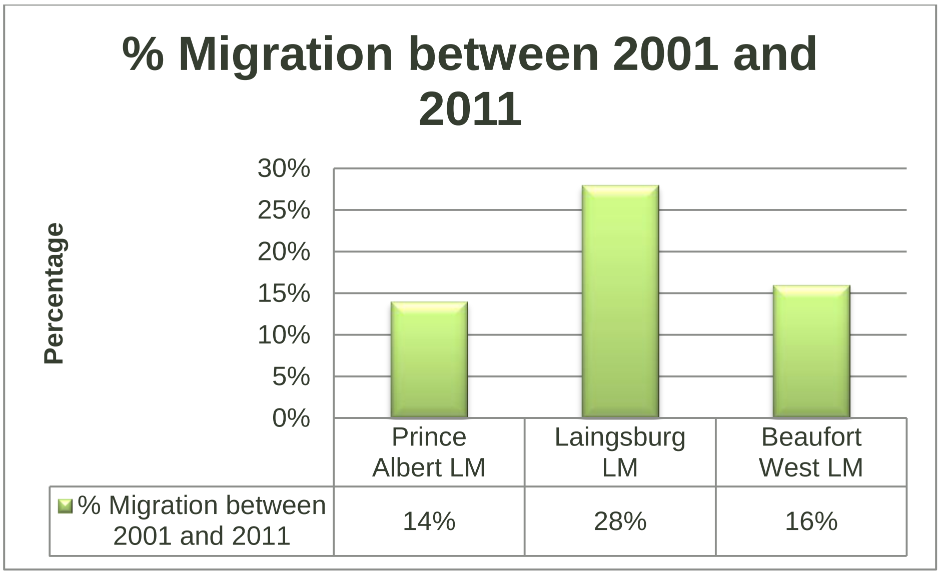
Temporary migration occurs when persons work elsewhere and return on a regular basis back to the Local Municipality. These patterns do not affect the numbers mentioned or the net decreases in population.

Table 12 and Figure 36 below shows the comparative migration patterns for the municipalities located within the Central Karoo District Municipality. It can be seen that Prince Albert Local Municipality had the lowest percentage of migration between 2001 and 2011 when comparing it to the migration patterns of the adjacent Municipalities in the district.

Table 12 | Migration – Prince Albert Local Municipality[83]

	Lived in the same place since 2001	Moved between 2001 and 2011	Born after October 2001 but never moved	Born after October 2001 and moved
Prince Albert LM	8 670	1 663	2 403	198
Laingsburg LM	4 493	1 931	1 216	276
Beaufort West LM	30 867	6 722	9 265	1 205

Figure 36 | Percentage migration between 2001 and 2011



[83] Stats SA: Census 2011

6.3.3 Health

Prince Albert Local Municipality has 3 fixed clinics, 1 hospital, and 2 emergency medical stations (EMS), see **Map 21** below.[84] **Table 13** below indicates Prince Albert Local Municipality's compliance with the quantitative guidelines for health facilities, according to the Guidelines for Human Settlement and Planning.

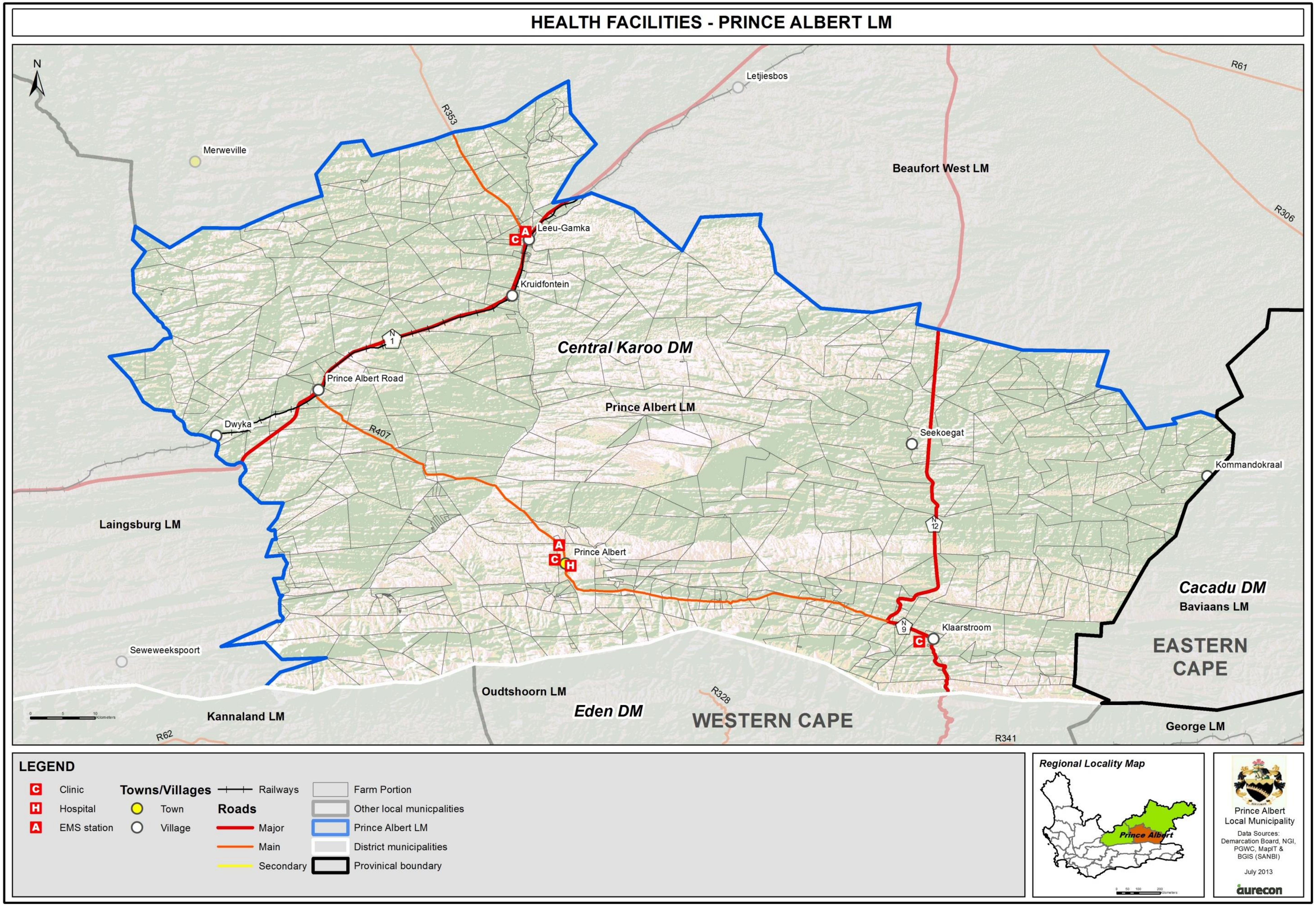
Table 13 | Compliance with the Guidelines for Human Settlement and Planning

Facility	Use capacity and thresholds[85]	Required based on the 2011 population figures	Current status	Shortfall/Surplus
Clinic	Estimate minimum of 5000 people	3	3	0

HIV/Treatment and Prevalence

The District Municipality has a HIV prevalence rate of 9%, the lowest in the Western Cape Province (NDOH, 2011), with only 0.7% of the Province's Anti-Retroviral Treatment (ART) load found in the Central Karoo District. The District has 3 ART sites, of which the third came online during 2010. The HIV transmission rate from mother to child, however, is the highest in the Province at 5.4% compared to a provincial average of 3.2%.[86]

[84] Western Cape Department of Health, 2013
[85] CSIR. 2000. 2 vol. Human Settlement Planning and Design: Quantitative Guidelines. CSIR Building and Construction Technology. Pretoria.
[86] CKDM. 2013. Draft Central Karoo District Municipality SDF. Topography and Slopes. p. 53



Map 21 | Prince Albert Local Municipality – Locality of Health Facilities

6.3.4 Education

One of the strategies of the Western Cape Strategic Plan is “Improving Education Outcomes”. This outcome will be reached by improving the life chances of all its children through the provision of quality education. The main indicators for measuring the progress made by the Western Cape Education Department (WCED) in providing quality education are:

- Improving literacy and numeracy in Grades 1–6
- Increasing the numbers passing in Grade 12 including an increase in numbers passing with matric exemption and mathematics and science.[87]

The Millennium Declaration states a commitment “to making the right to development a reality for everyone and to freeing the entire human race from want.”[88] The declaration specifies a set of eight goals with a set of targets to fully define these goals.

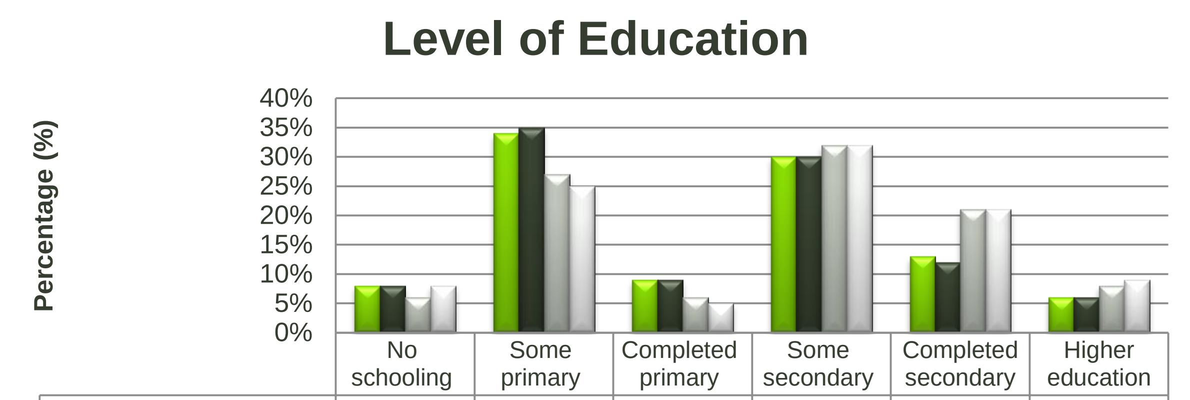
The following targets are specified which are related to education:

- Millennium Development Goal 2: Achieve universal primary education, Target 3: Ensure that, by 2015, all boys and girls complete a full course of primary schooling.
- Millennium Development Goal 3: Promote gender equality and empower women, Target 4: Eliminate gender disparities in primary and secondary education preferably by 2005, and at all levels no later than 2025.

Figure 37 below indicates the education level of the population age 20 years and older. When comparing the level of education of Prince Albert Local Municipality with the whole of South Africa, one will see that there are no major differences.

In 2011, ± 42% of the economically able population have not completed primary education, thus the above mentioned Goal 2: Target 3 has not yet been reached. In terms of gender equality in primary and secondary education, no actual gender disparities exist in Prince Albert Local Municipality or South Africa.

Figure 37 | Percentage of people by level of education[89]



	No schooling	Some primary	Completed primary	Some secondary	Completed secondary	Higher education
Prince Albert LM Male	8%	34%	9%	30%	13%	6%
Prince Albert LM Female	8%	35%	9%	30%	12%	6%
South Africa Male	6%	27%	6%	32%	21%	8%
South Africa Female	8%	25%	5%	32%	21%	9%

[87] WC PROVINCIAL GOVERNMENT. 2010. The Western Cape Draft Strategic Plan. p. 14
[88] PERKINS, D.H et al. Economics of Development: Millennium Development Goals. 6th ed. 312p.
[89] Stats SA: Census 2011

6.3.4.1 Educational Facilities

According to the Human Settlement and Planning Guidelines for educational facilities, Prince Albert Local Municipality has sufficient schools, see **Table 14** below.

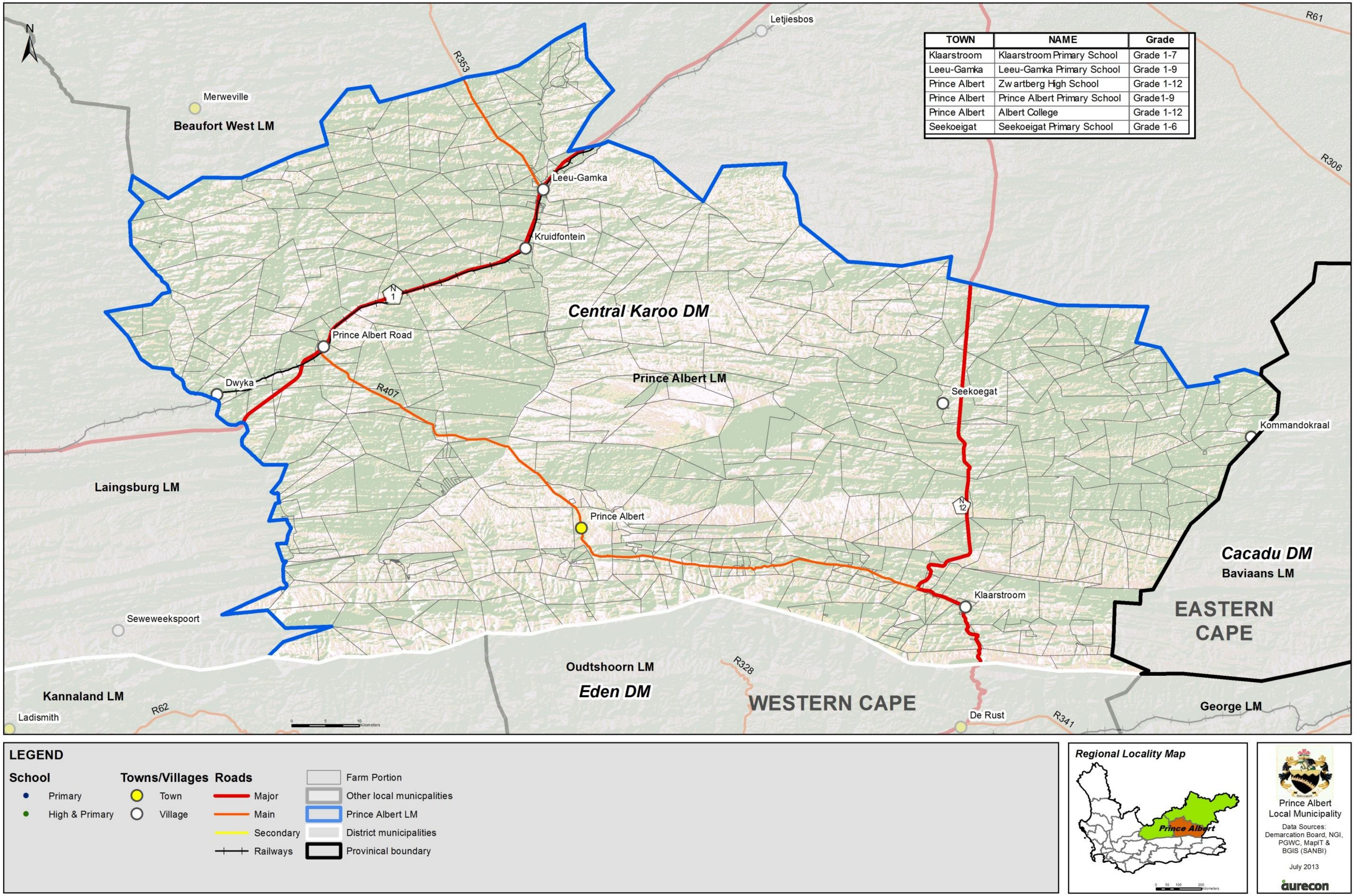
All the towns/settlements of Prince Albert Local Municipality have primary schools except for Prince Albert Road, see **Map 22** below. The only high schools in Prince Albert Local Municipality are situated in Prince Albert. The Leeu Gamka high school learners travel by bus to Beaufort West and the Klaarstoom high school learners travel by bus to De Rust.

Table 14 | Educational Facilities

Facility	Use capacity and thresholds[90]	Required based on the 2011 population figures	Current status	Shortfall/Surplus
Primary School	Estimate minimum population: 3000-4000	4	6	+2
High School	Estimate minimum population: 3000-4000	2	2	0

[90] **CSIR. 2000. 2 vol. Human Settlement Planning and Design: Quantitative Guidelines. CSIR Building and Construction Technology. Pretoria.**

EDUCATION - PRINCE ALBERT LM



TOWN	NAME	Grade
Klaarstroom	Klaarstroom Primary School	Grade 1-7
Leeu-Gamka	Leeu-Gamka Primary School	Grade 1-9
Prince Albert	Zw artberg High School	Grade 1-12
Prince Albert	Prince Albert Primary School	Grade1-9
Prince Albert	Albert College	Grade 1-12
Seekoegat	Seekoegat Primary School	Grade 1-6

Map 22 | Educational Facilities - Prince Albert Local Municipality

6.3.4.1 Learner Educator ratio

The learner: educator ratio is a measure of the average number of learners per educator. It is generally accepted that the lower the number of learners, the more attentive the teacher will be to a learner, with better results produced overall.

The excepted norm for the learner: educator ratio is 1 educator for every 40 learners. With reference to **Table 15** below it is clear that the amount of educators is sufficient for the number of learners in Prince Albert Local Municipality.

Table 15 | Learners and Educators per School - 2013

Town/village	School Name	Learner Enrolment Total	Educator Total	Learner: Educator Ratio
Klaarstroom	Klaarstroom Primary School	117	4	1:29.25
Prince Albert	Zwartberg High School	411	16	1:25.69
Prince Albert	Albert College	No data	No data	No data
Prince Albert	Prince Albert Primary School	1058	30	1:35.27
Leeu Gamka	Leeu Gamka Primary School	590	20	1:29.50
Seekoeigat	Seekoeigat Primary School	17	2	1:8.50

6.3.5 Economics

6.3.5.1 Employment Status

Unemployment refers to people within the economically active (15-65 year age groups) who did not work during the seven days prior to the interview, wanted to work and were available to start work within a week of the interview, and who had taken active steps to look for work or to start some form of self-employment in the four weeks prior to the interview. It should also be noted that some people are satisfied with a grant as is source of income and do not look for employment opportunities.

The unemployment rate of Prince Albert Local Municipality decreased substantially from 35.2% in 2001 to 19.4% in 2011 as shown in **Table 16** below. Unemployment has economic costs that reduce output, waste productive power and may even erode human capital. It has social costs as well. Such costs are the reason why a low unemployment rate is typically a high-priority policy objective in most societies.

Table 16 | Employment Status of the population aged between 15 and 65[91]

	Employment	Unemployment	Unemployment Rate
1996	2 392	591	19.8%
2001	2 483	1 346	35.2%
2011	3 488	841	19.4%

Implications for Prince Albert Local Municipality:

- The unemployment rate of Prince Albert Local Municipality decreased since 1996. It is proposed that the identified strategies of The New Growth Path be implemented to further decrease unemployment.

6.3.5.2 Dependency Ratio

The dependency ratio indicates the number of individuals that are below the age of 15 and over the age of 64 that are dependent on the economically active persons. According to Stats SA Census the dependency ratio decreased from 76% in 1996 to 56% in 2011; but of this 56% only 3 488 persons (or 80.6% of the age groups that represent the economically active) are employed, see **Table 17** below.

Table 17 | Productive Workforce[92]

	Age 0-15	Age 15-64	Age 64+	Dependency ratio	% Economic active
1996	3 434	5 398	642	76%	24%
2001	3 613	6 266	633	68%	32%
2011	3 885	8 410	841	56%	44%

[91] STATISTICS SOUTH AFRICA. 2012. Census 2011 Municipal report Western Cape.p.79
[92] STATISTICS SOUTH AFRICA. 2012. Census 2011 Municipal report Western Cape.p.65

6.3.5.3 Employment Sector

Within the spectrum of the employed population, the agriculture, hunting, forestry and fishing sector is the main sector of employment, but this sector decreased from 2 378 persons in 2001 (55.19% of the employed population in 2001) to 622 persons in 2007 (31.32% of the employed population in 2007). The primary industries were the main industry in 2001 followed by the tertiary industries. In 2007 the tertiary industries were the main industry followed by the primary industries as shown in **Table 18** below.

Care should however be taken when interpreting the 2007 Community Survey information data, given the fact that this was a sample survey.

Table 18 | Sector of Employment[93]

	2001	2007
Primary industries	**2 384 (55.33%)**	**622 (31.32%)**
Agriculture, hunting, forestry and fishing	2 378 (55.19%)	622 (31.32%)
Mining and quarrying	6 (0.14%)	0 (0%)
Secondary industries	**546 (12.67%)**	**631 (31.77%)**
Manufacturing	132 (3.06%)	131 (6.60%)
Electricity; gas and water supply	0 (0%)	12 (0.60%)
Construction	414 (9.61%)	488 (24.57%)
Tertiary industries	**1 106 (32%)**	**733 (36.91%)**
Wholesale and retail trade; repairs, hotels and restaurants	252 (12.18%)	240 (12.08%)
Transport, storage and communication	87 (2.02%)	31 (1.56%)
Financial intermediation; insurance; real estate and business services	87 (2.02%)	163 (8.21%)
Community; social and personal services	680 (15.78%)	299 (15.06%)

[93] Stats SA: Census 2001 & Community Survey 2007

> ***Implications for Prince Albert Local Municipality:***
>
> - A large number of tourism and game farms exist and a large number of properties are owned by the retired population, which could explain the decrease in the agricultural sector of employment.

6.3.5.4 Income levels & Poverty

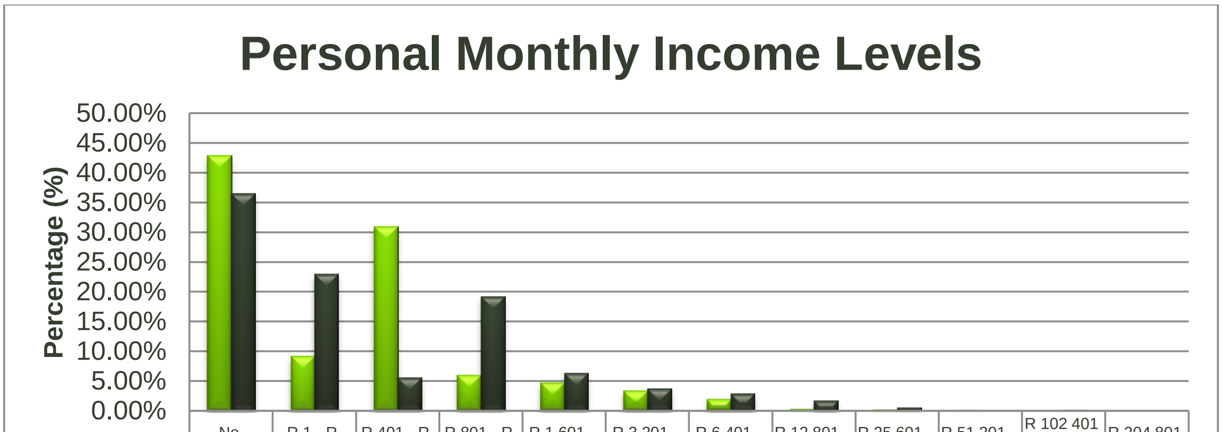
The Millennium Declaration set the following target for 2015[94]:

- Millennium Development Goals 1: Eradicate extreme poverty and hunger, Target 1: To half the proportion of people living on less than a dollar (R9.71 on 28 May 2013) a day.

The Human Poverty Index (HPI) introduced in 1996, focuses on three key dimensions.[95]
- The capability to survive (which is measured by vulnerability to early death defined as before 40 years)
- The capability to be knowledgeable (measured by the adult illiteracy rate)
- The capability to have access to private income as well as public provisioning (measured by the percentage of malnourished children under five and by the percentage of people without access to safe water).

The South Africa's Human Poverty Index is the population living on an income of less than US$2 (approximately R19.42 on 28 May 2013) per day.[96]

Figure 38 | Income per person per month in Prince Albert Local Municipality[97]



	No income	R 1 - R 400	R 401 - R 800	R 801 - R 1 600	R 1 601 - R 3 200	R 3 201 - R 6 400	R 6 401 - R 12 800	R 12 801 - R 25 600	R 25 601 - R 51 200	R 51 201 - R 102 400	R 102 401 - R 204 800	R 204 801 or more
2001	42.94%	9.18%	31.03%	6.06%	4.75%	3.42%	1.94%	0.31%	0.19%	0.12%	0.07%	0.00%
2011	36.59%	23.02%	5.65%	19.22%	6.30%	3.74%	2.91%	1.71%	0.58%	0.09%	0.14%	0.06%

Thus according to the Human Poverty Index, approximately 83.15% of the Prince Albert Local Municipality people lived in poverty (less than R602.02 per month) in 2001, which declined to 65.26% in 2011, see **Figure 38** above.

To determine if Goal 1: Target 1 of the Millennium Development Goals have been reached, one needs to determine how many persons have an income of less than a dollar a day which equals too an

[94] PERKINS, D.H et al. Economics of Development: Millennium development Goals. 6 ed. 312 p.
[95] SQUIRES, A & WELLMANN, G. 2010. Northern Cape Human Development Report. Department of Social Development, Northern Cape. 211 p
[96] SQUIRES, A & WELLMANN, G. 2010. Northern Cape Human Development Report. Department of Social Development, Northern Cape. 211 p
[97] Stats SA: Census 2001 & 2011

amount of R301.01 p.m. Approximately 52.12% had an income of less than a dollar in 2001, which increased to 59.61% in 2011, therefor the before mentioned goal is not yet reached.

The Municipality offer additional social support through its indigent policy. The indigent policy provides free and discounted rates on basic services such as water, electricity, sanitation, refuse and property rates.[98]

6.3.5.5 Access to social security

Social grants are successfully reducing poverty in South Africa. It is estimated that social grants reduce poverty by 67% when the destitution line is used as the benchmark.[99]

In 2011, approximately 16% (2 165 beneficiaries) of the population of Prince Albert Local Municipality received some form of social grant, see **Table 19 and Figure 40** below.

The majority of which receives a Child Support Grant. Child Support Grants are granted to individuals not earning more than R34 800 per year and couples not earning more than R 69 600 per year.

Secondly a substantial number of the population receives a Disability Grant. **Figure 39** shows a disabled person in Church Street.

Figure 39 | Disabled person in Prince Albert

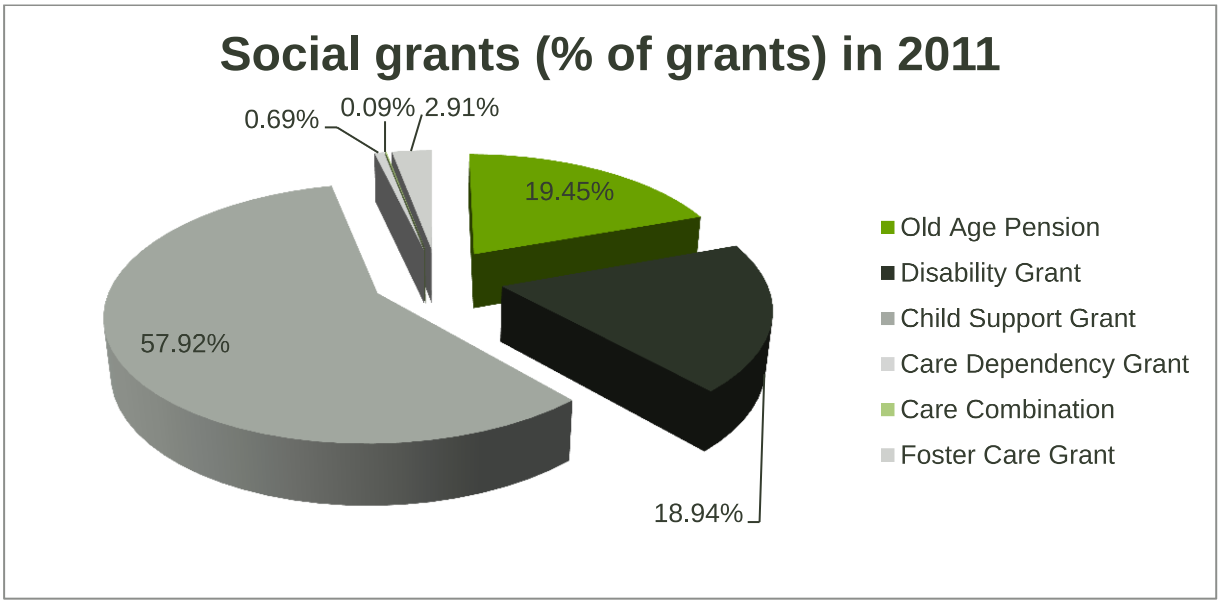


Table 19 | Prince Albert Local Municipality Grant Profile[100]

	Prince Albert	Leeu Gamka	Klaarstroom	Prince Albert Road	Total
Old Age Pension	235	123	56	7	**412**
Disability Grant	259	113	31	7	**410**
Child Support Grant	682	426	133	13	**1 254**
Care Dependency Grant	7	5	3	0	**15**
Care Combination	2	0	0	0	**2**
Foster Care Grant	34	28	1	0	**63**
Total	**1 219**	**695**	**224**	**27**	**2 165**

[98] PRINCE ALBERT LOCAL MUNICIPALITY. 2012. Prince Albert Local Municipality 3rd Generation IDP, 2012-2017. p. 34
[99] SQUIRES, A & WELLMANN, G. 2010. Northern Cape Human Development Report. Department of Social Development, Northern Cape. 153 p
[100] PRINCE ALBERT LOCAL MUNICIPALITY. 2012. Prince Albert Local Municipality 3rd Generation IDP, 2012-2017. p. 34

Figure 40 | Prince Albert Local Municipality - Type of Social Grant



Implications for Prince Albert Local Municipality:

- There are a high number of disabled persons in Prince Albert Local Municipality; it is therefore proposed that the accessibility within Prince Albert Local Municipality be improved to accommodate the disabled population.
- It is proposed that the sidewalks of Prince Albert Local Municipality be upgraded in such a way to accommodate the disabled populations.

6.3.6 Comprehensive Rural Development Programme (CRDP)

The Department of Rural Development and Land Reform has been given the mandate by the President of South Africa to develop a Comprehensive Rural Development Programme (CRDP) throughout the country. To achieve this mandate the Department embarked on developing a fresh approach to rural development. The programme is being focused on enabling rural people to take control of their destiny, with the support from government, and thereby dealing effectively with rural poverty through the optimal use and management of natural resources. This will be achieved through a co-ordinated and integrated broad-based agrarian transformation as well as the strategic investment in economic and social infrastructure that will benefit entire rural communities.

The department identified a three pronged strategy to ensure that they achieve the following objectives:

- Agrarian Transformation includes increasing all types of agricultural production; optimal and sustainable use of natural resources; the use of appropriate 2 technologies; food security; and improving the quality of life for each rural household.
- Rural Development includes improving economic and social infrastructure.
- Land Reform including restitution, redistribution, land tenure reform.

The DRDLR undertook a status quo analysis for the Western Cape CRDP in Prince Albert Local Municipality Ward 1. The objective of the analysis was to assist the DRDLR in making recommendations to uplift the area through the implementation of a CRDP. [101]

6.3.6.1 Land Reform

There are four Land Redistribution projects listed in Prince Albert Local Municipality of which the land is already transferred. **Table 20** below summarizes the details of each project and **Map 23** below shows the locality of the projects.

Table 20 | Land Reform Projects - Prince Albert Local Municipality[102]

Project Name	Type	Hectares	Status of Project
Frieslaar Family	Settlement Land Acquisition Grant (1994-2000) – (SLAG)	0.0387	Land Transferred
Leeu Gamka Small Farmers	Land Redistribution for Agricultural Development (2001-2010) – (LRAD)	164.6019	Land Transferred
Prince Albert Commonage	Land Redistribution for Agricultural Development (2001-2010) – (LRAD)	5580.3060	Land Transferred
Swartrivier	Pro-Active Land Acquisition Strategy (2006-date) – (PLAS)	3647.6702	Land Transferred

[101] DRDLR. 2011. Prince Albert Local Municipality Leeu Gamka Status Quo Report. p. 5
[102] Per. Com. Ms Gaynor de Jager, WC Department of Rural Development and Land Reform -

The type of programmes of the Land Reform projects can be described as follows:

- ***Settlement Land Acquisition Grant (1994-2000) – (SLAG)***

The Settlement Land Acquisition Grant (SLAG) was a R16 000 cash grant for which poor and landless black South Africans could form a group to apply to buy and develop farm land. The applications took the form of group settlement with some production, cooperative production and /or commonage schemes, or farm settlements of farm workers and farm worker equity.[103]

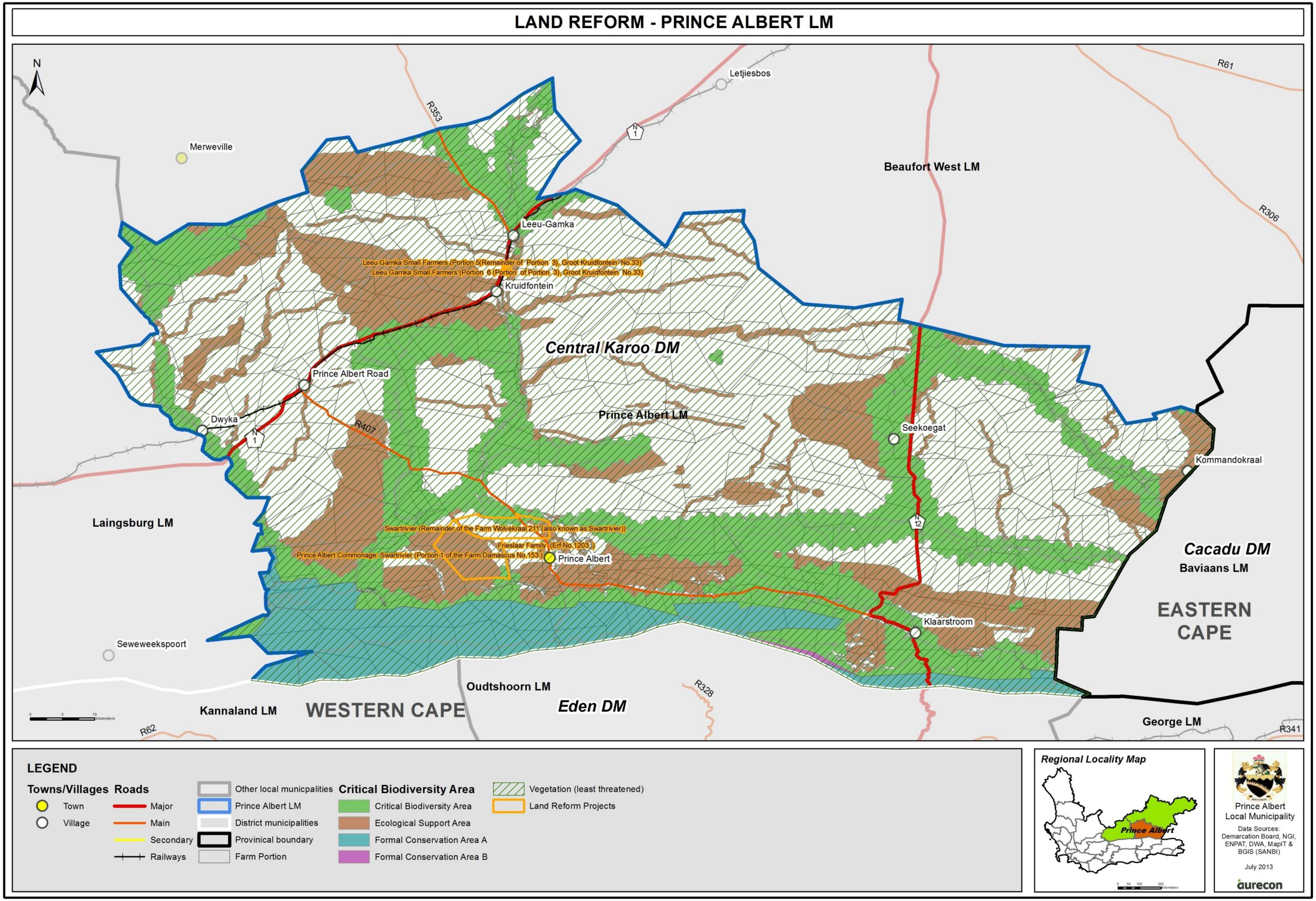
- ***Proactive Land Acquisition Strategy (PLAS)***

PLAS focuses primarily on the poor and is based on the state pro-actively purchased land with high agricultural potential. The Department then selects beneficiaries who can lease the land with the option to purchase the land.

- ***Land Redistribution for Agricultural Development (LRAD)***

This programme provides grants to previously disadvantaged individuals to get land for agriculture. Applicants who want to farm may apply for an LRAD grant, but have to make a contribution, either in cash or in labour, to a minimum of R5 000 - more if the grant is larger. Grants vary from a minimum of R20 000 to a maximum of R100 000.[104]

[103] **ETU. 2001. Land Reform. http://www.etu.org.za/toolbox/docs/government/land.html. Date of access: 19 July 2013**
[104] **DRDLR. 2011. Prince Albert Local Municipality Leeu Gamka Status Quo Report. p. 6**



Map 23 | Land Reform Projects – Prince Albert Local Municipality

6.3.7 Cemeteries

Currently there are nine cemeteries situated within the borders of Prince Albert Local Municipality. There are five historic cemeteries in Prince Albert (two of which is currently in use), two cemeteries in Leeu Gamka, one in Klaarstroom, one in Seekoeigat and no cemetery in Prince Albert Road, see **Map 24** below.

The current registers of existing graves and reservations are maintained by hand, no electronic system exists. The capacity of these existing cemeteries are sufficient to accommodate the future demand in the medium term, thus there is no need to identify a supplementary cemetery. The cemeteries are maintained by the Municipality and are in a fairly good condition.[105]

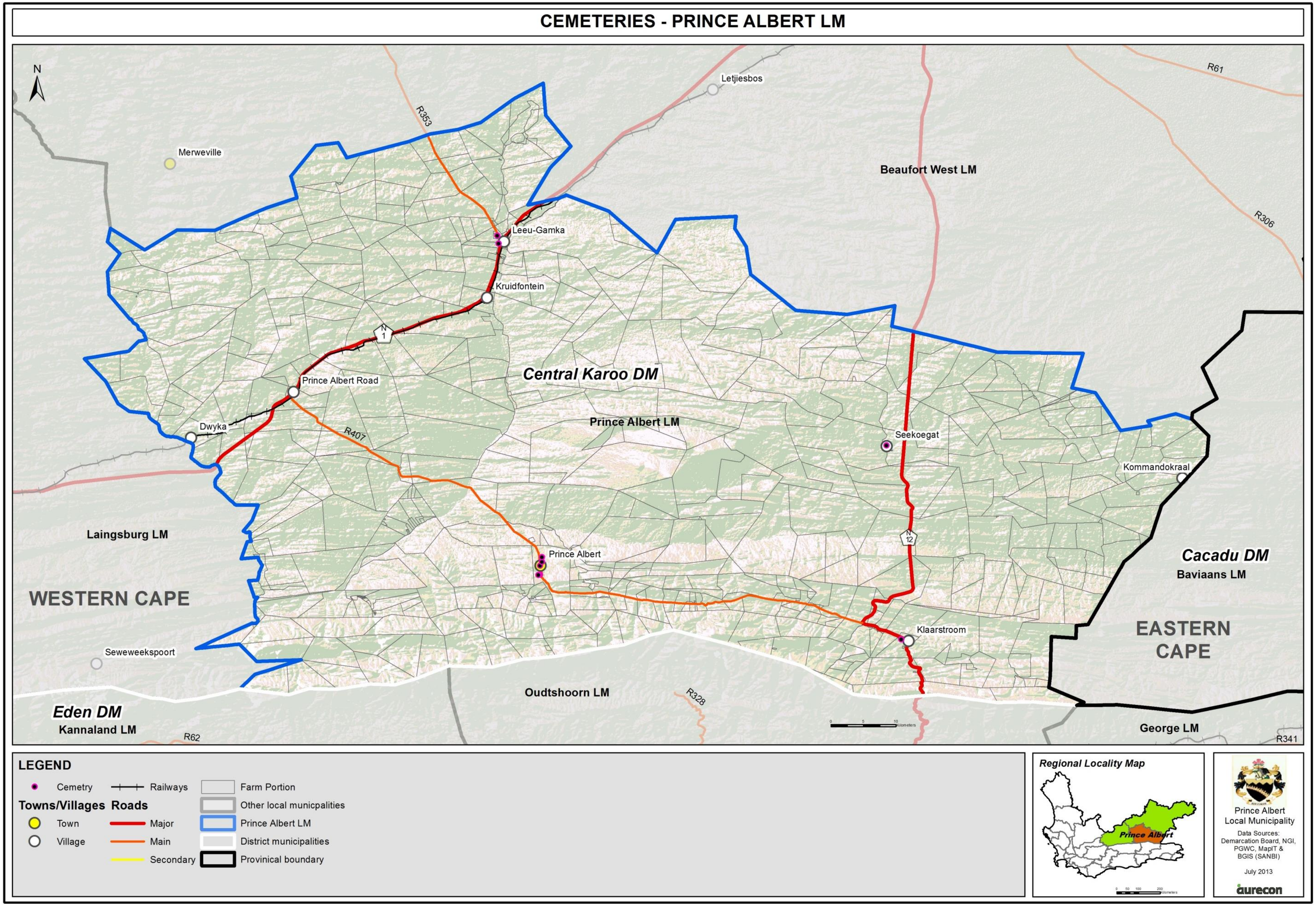
Further to the above a large number of unsurveyed farm and other informal cemeteries including several pre-colonial Khoi gravesites exist.

Implications for Prince Albert Local Municipality:

- All gravesites which are older than 60 years and not in a cemetery are protected in terms of SAHRA. It is therefore proposed that all unsurveyed gravesite within the Prince Albert municipal area be surveyed.

[105] PRINCE ALBERT LOCAL MUNICIPALITY. 2012. Prince Albert Local Municipality 3rd Generation IDP, 2012-2017. p. 54

CEMETERIES - PRINCE ALBERT LM



Map 24 | Locality of Cemeteries – Prince Albert Local Municipality

6.3.8 Crime

One of the strategies of the Western Cape Strategic Plan is “Increasing Safety”. The PGWC wants to make every community in the province a safe place in which to live, work, learn, relax and move about.

The main focus of the strategy is to create safe environments and communities in which crime is less likely to happen in the first place. The strategic plan identified three “horizons” along which this strategy will operate:

- Removing opportunities to commit crime
- Decreasing the motivation of offenders to commit crime
- Removing the longer-term root causes of crime

Figure 41 below gives different examples of measures that can be taken to reach the objectives of the three “horizons”.

Figure 41 | The increasing safety strategy focus[106]

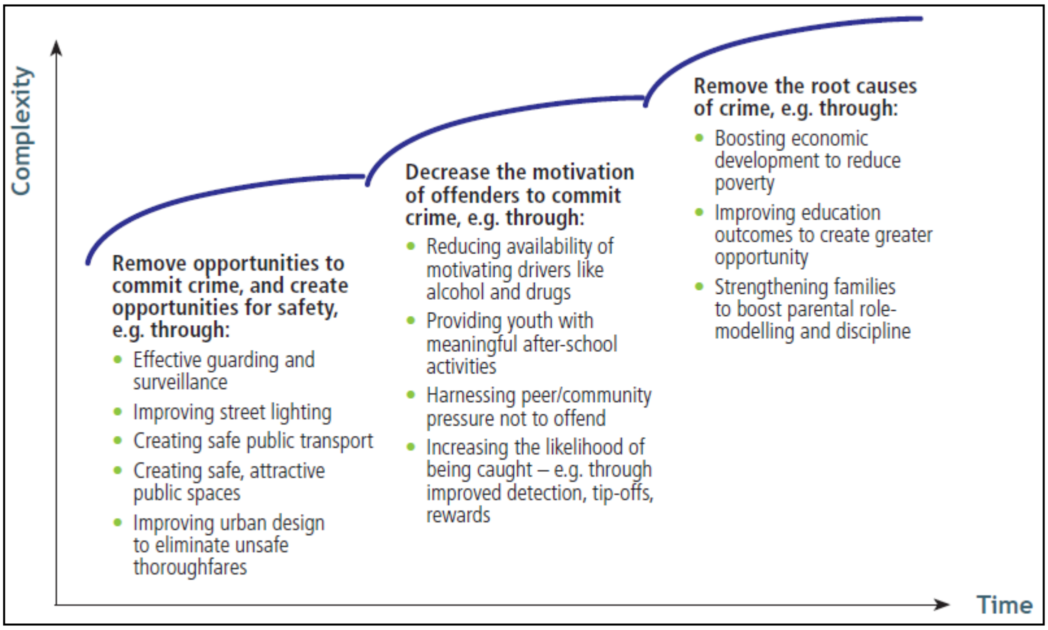


Table 21 and Figure 42 below shows the total number of crimes committed within the borders of Prince Albert Local Municipality increased from 677 in 2007/2008 to 894 in 2011/2012. In terms of the types of crimes committed, the highest number of crimes is cases of assault (28%) and cases of drug related crimes (23%). During the community workshop in Leeu-Gamka the community also complained about the increase in alcohol and drug abuse and violence against women.

[106] WC PROVINCIAL GOVERNMENT. 2010. The Western Cape Draft Strategic Plan. p. 35

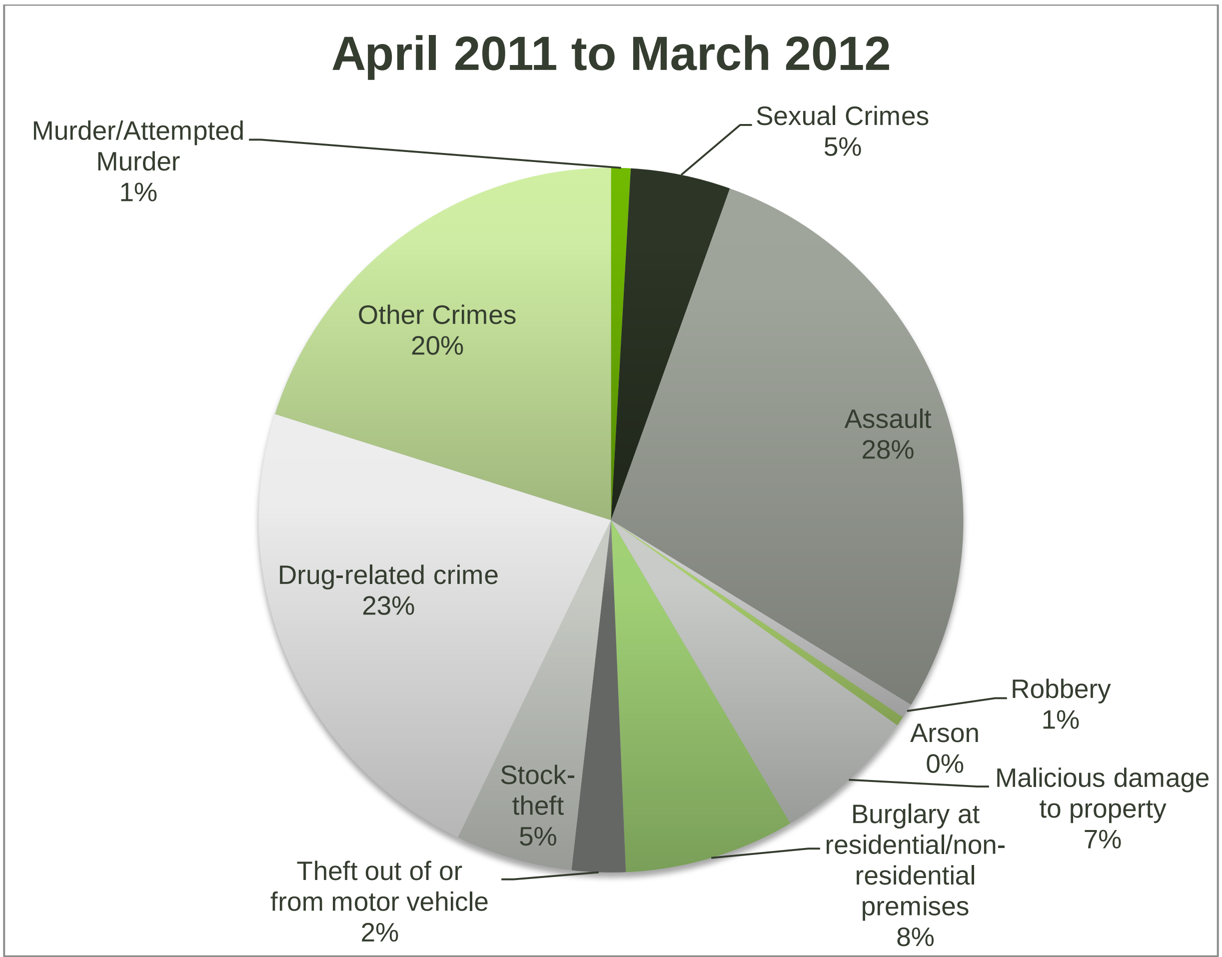
Table 21 | Crime in Prince Albert Local Municipality[107]

Crime Category	April 2007 to March 2008	April 2008 to March 2009	April 2009 to March 2010	April 2010 to March 2011	April 2011 to March 2012
Murder/Attempted Murder	11	4	11	8	8
Sexual Crimes	17	27	27	34	41
Assault	226	230	212	270	253
Robbery	7	5	7	4	6
Arson	1	1	0	0	4
Malicious damage to property	31	52	41	35	59
Burglary at residential/non-residential premises	51	66	54	66	70
Theft of motor vehicle and motorcycle	1	1	3	0	1
Theft out of or from motor vehicle	3	10	18	15	22
Stock-theft	29	30	27	23	48
Illegal possession of firearms and ammunition	4	5	1	0	0
Drug-related crime	160	169	172	197	203
Driving under the influence of alcohol or drugs	16	15	21	34	14
All theft not mentioned elsewhere	72	74	89	85	105
Commercial crime	15	7	9	7	17
Shoplifting	1	2	4	8	14
Robbery at non-residential premises	1	0	2	0	2
Culpable homicide	21	5	10	12	17
Public violence	1	0	1	0	0
Crimen injuria	8	9	12	9	7
Neglect and ill-treatment of children	1	0	2	0	3
Kidnapping	0	0	0	0	0

[107] SOUTH AFRICAN POLICE SERVICES. 2011. Crime Statistics. http://www.saps.gov.za/statistics/reports/crimestats/2011/provinces/n_cape/northern_cape.htm#top. Date of access: 18 March 2013

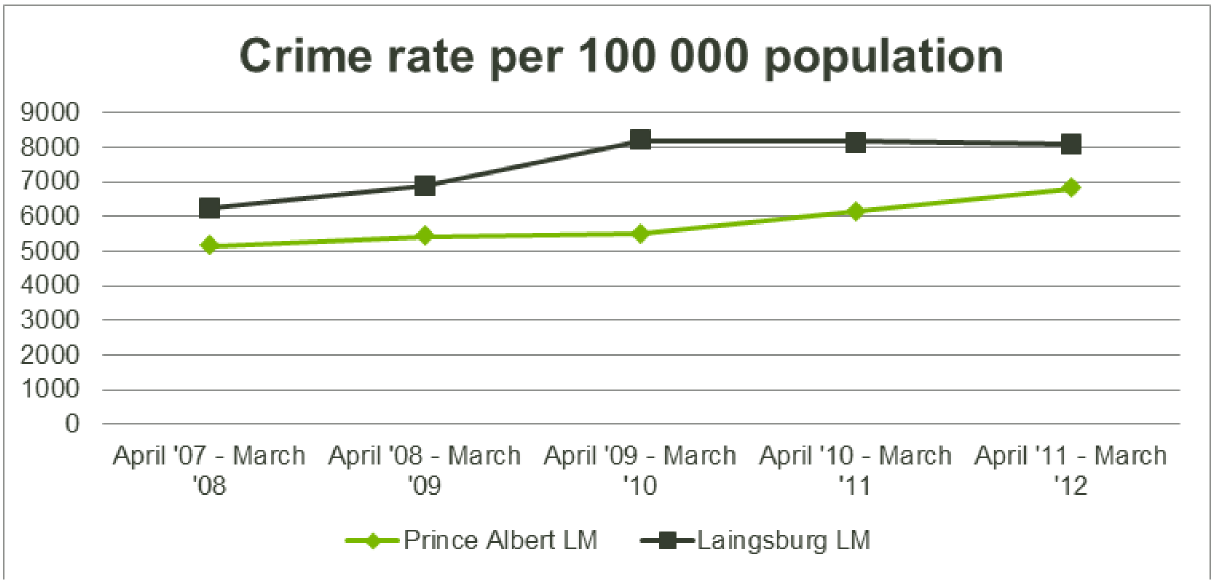
Crime Category	April 2007 to March 2008	April 2008 to March 2009	April 2009 to March 2010	April 2010 to March 2011	April 2011 to March 2012
TOTAL	**677**	**712**	**723**	**807**	**894**

Figure 42 | Crime occurrences in Prince Albert Local Municipality: April '11 - March '12



If one compare the Prince Albert Local Municipality crime rate per 100 000 population with Laingsburg Local Municipality, the crime rate of Prince Albert Local Municipality were lower than the crime rate of Laingsburg Local Municipality since 2007, see **Figure 43** below.

Figure 43 | Crime rate per 100 000 population[108]



There are three police stations located within the borders of Prince Albert Local Municipality in Prince Albert, Klaarstroom and Leeu Gamka. See **Map 25** below.

Table 22 shows that in the Western Cape there is 1 Police Station for every 38 561 persons and in Prince Albert Local Municipality, there is 1 Police Station for every 4 379 persons.

Table 22 | Police Station: Population Ratio

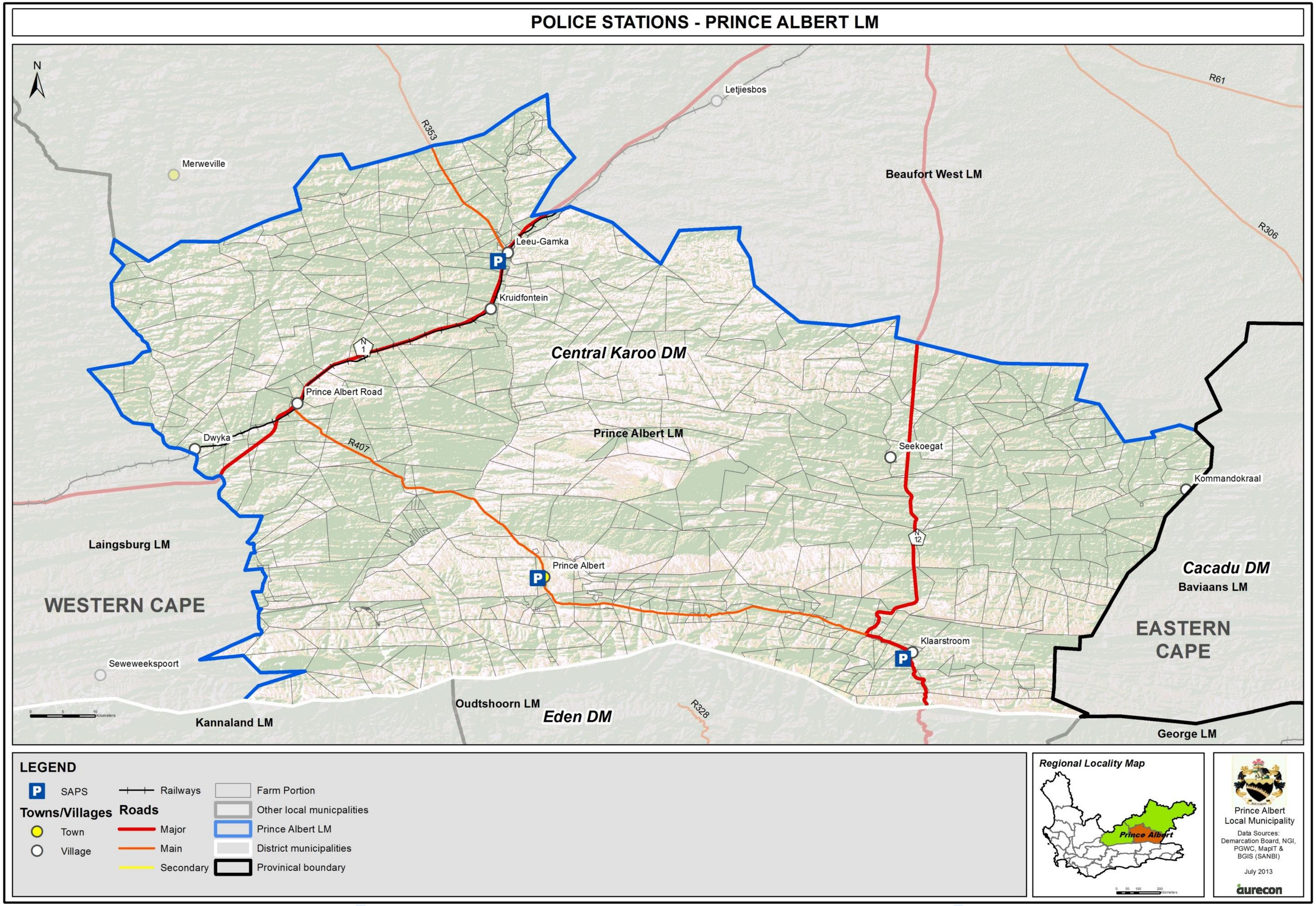
	Number of Police Stations	Police Station: Population ratio
Western Cape	151	1:38 561
Prince Albert LM	3	1:4 379

Implications for Prince Albert Local Municipality:

- The reason for the increase in crime needs to be investigated. The number of police stations in Prince Albert Local Municipality is regarded as ample. Thus one needs to look into the number of police officers and their performance. The Leeu Gamka community identified the issue of "The unreliability of the Leeu Gamka SAPS" during the issues and vision workshop.

[108] SOUTH AFRICAN POLICE SERVICES. 2011. Crime Statistics. http://www.saps.gov.za/statistics/reports/crimestats/2011/provinces/n_cape/northern_cape.htm#top. Date of access: 18 March 2013

POLICE STATIONS - PRINCE ALBERT LM



Map 25 | Locality of Police Stations – Prince Albert Local Municipality

6.3.9 Property Market, Patterns and Growth Pressures

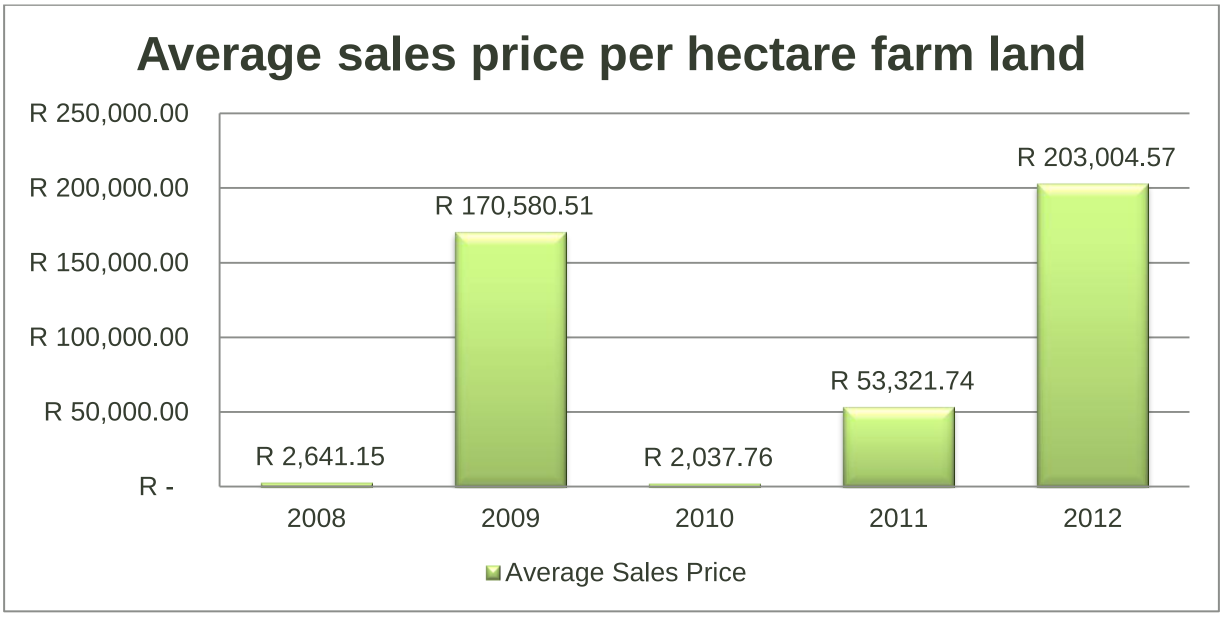
The below mentioned data was derived from Karoo Towns & Farms (Pty) Ltd a franchise of Pam Golding Properties Franchise Services (Pty) Ltd situated in Prince Albert. Pam Golding is one of the most active estate agents; therefore the information below should give a representative picture of the property market in the Municipality. All subsidised housing had been excluded and does not form part of the Free Market System.

Figure 44 shows a decrease in the number of farm sales from 2008 to 2011 and a significant increase during 2012. Overall the average price per hectare of farmland increased between 2008 and 2012, see **Figure 45** below. Due to some very high and very low sales prices which inflated and deflated the averages there are substantial differences between the average price per hectare between 2008 and 2012.

Figure 44 | Prince Albert Local Municipality farms: Number of Sales



Figure 45 | Average value of farm land per hectare



The overall trend is that the number of sales has declined over the past 5 years, see **Figure 46**. **Figure 47** shows that the value of properties increased substantially from ±R850 000 in 2008 to ±R1 400 000 in 2012.

Figure 46 | Prince Albert: Number of property sales

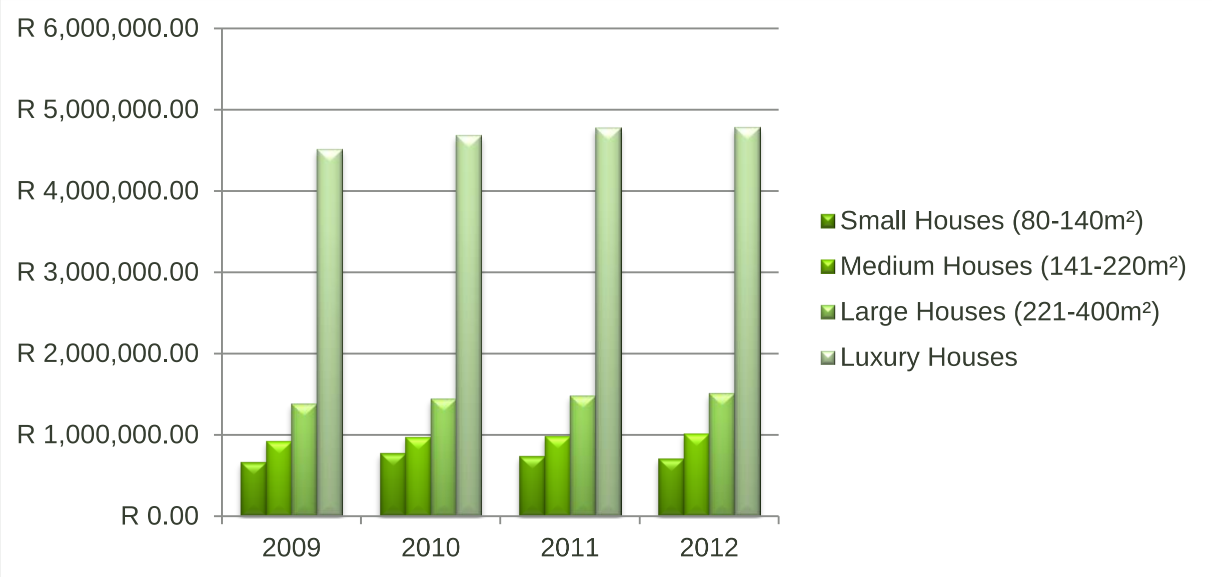


Figure 47 | Prince Albert: Average Property Sales Price



When the property information is compared to the National Absa Average House Prices for small, medium and large houses, it is seen that the Prince Albert 2012 average property sales value was roughly the same as the national average of large houses namely: R 1,511,857.00. But the average size of the Prince Albert properties is much bigger than the Absa large houses of between 221-400m^{2,} see **Figure 48** below.

Figure 48 | Absa average house price



Implications for Prince Albert Local Municipality:

- The high sales prices of farm land and properties in Prince Albert, gives an indication of the exclusiveness of properties.

6.3.10 Municipal Finances

Figure 49 | Operating income and expenditure

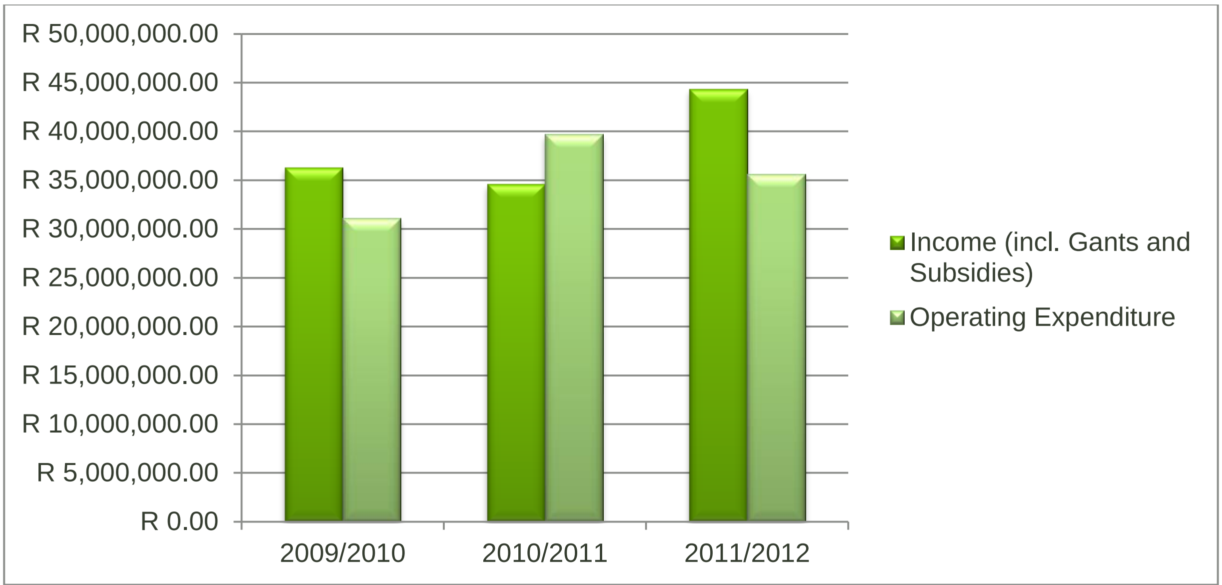


Figure 49 above shows the income and expenditure of Prince Albert Local Municipality over the past three financial years. The revenue increased quite substantially from the 2010/2011 to the 2011/2012 financial year and the operating expenditure decreased from 2010/2011 to 2011/2012.

Figure 50 and 51 below presents the Prince Albert Local Municipality arrears in rates and services. The total debt in terms of services increased considerably from 2010/2011 up until 2011/2012. Most of the outstanding debt is for the delivery of water.

Figure 50 | Arrears in rates and services

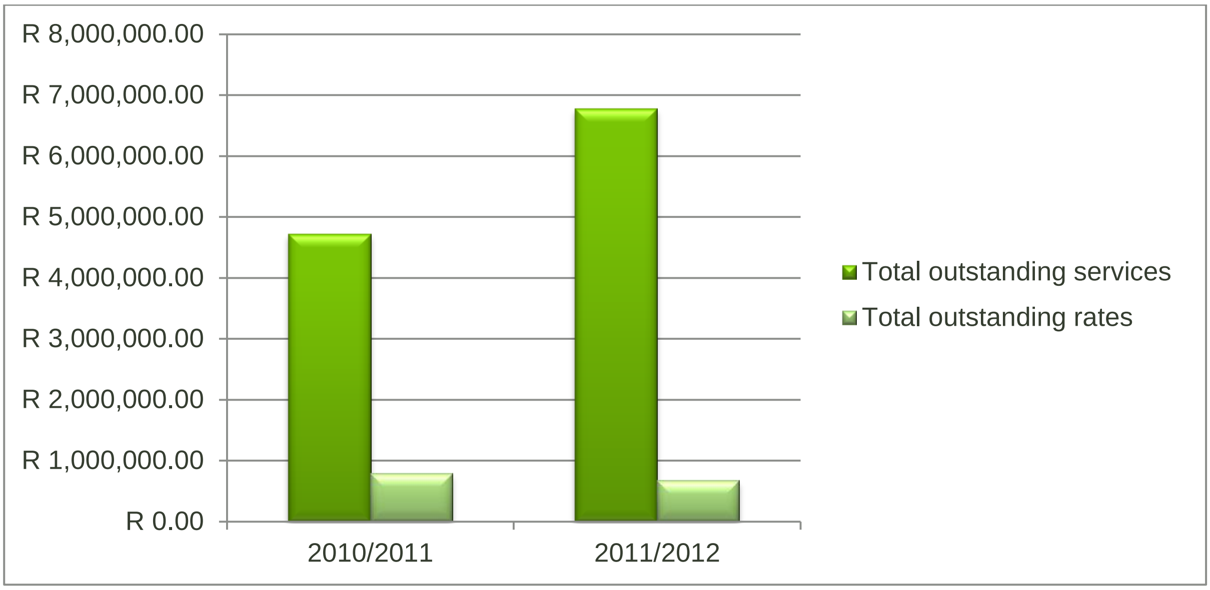
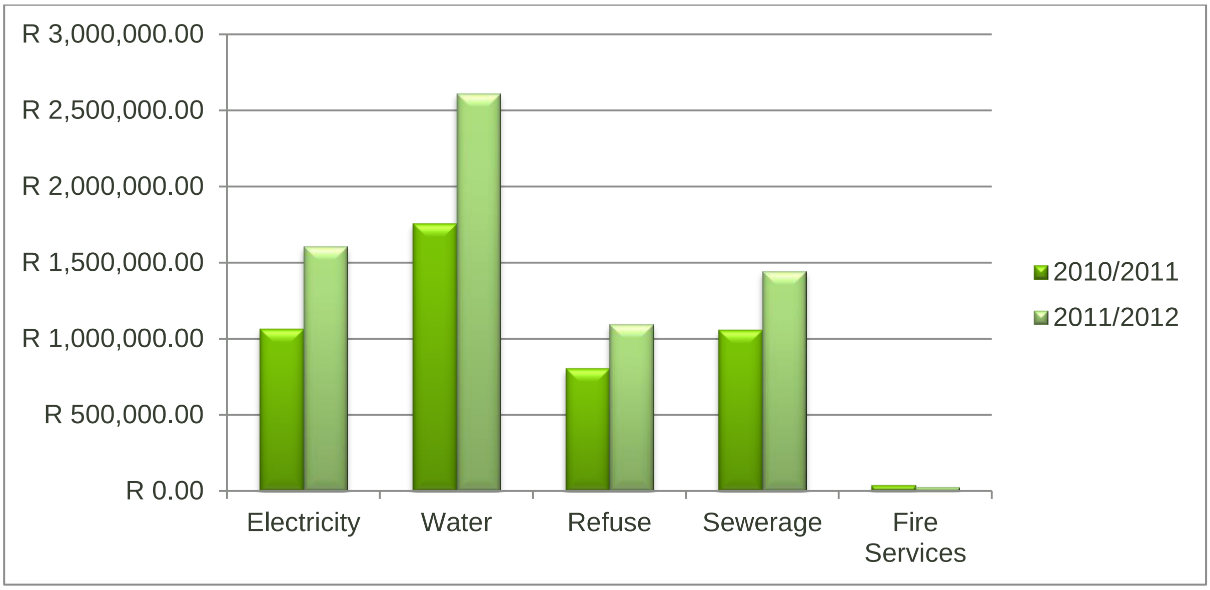


Figure 51 | Different types of arrears in services



Implications for Prince Albert Local Municipality:

- There is an increase in the levels of operating income from 2009/2010 to 2011/2012. There is however still a dependency on grant and subsidy funding.
- An increase in operating expenditure has occurred, additionally non-payment for services have increased substantially. This issue must be addressed in a proactive manner and positive payment trends should be reinforced.

6.4 Built Environment

6.4.1 Hierarchy and Role of Settlements

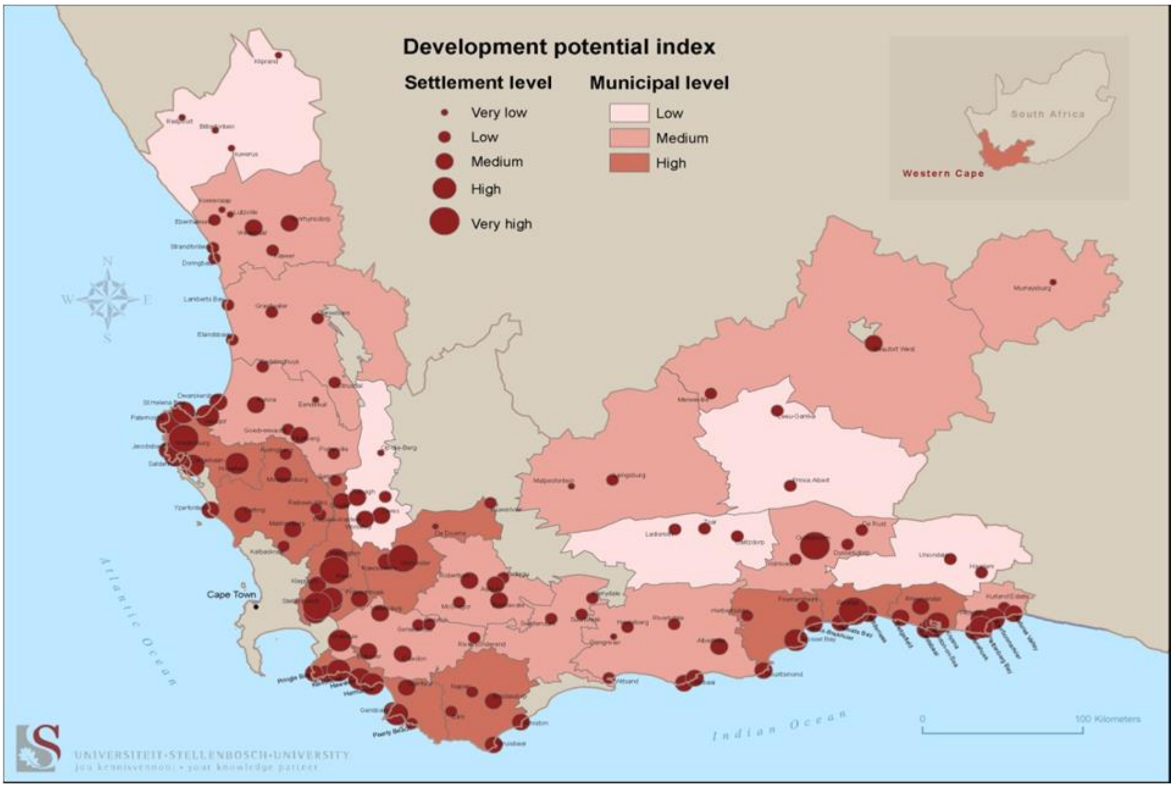
The SDF covers the total municipal area in the necessary detail to make proposals and to guide future decision making on development. It is however also necessary to have a closer look at the urban areas since they remain complex and key to any future development. One should however note that the SDF at this level does not provide detail level planning proposals. The municipal Human Settlement Plan will incorporate detailed level planning.

The purpose of this section is not to give a detailed view of land uses and zoning, but rather to establish patterns and issues that affect development. The assessment focuses on Prince Albert, Leeu Gamka, Klaarstroom, Prince Albert Road and Seekoeigat and deals with general land use patterns.

Further to the above the growth potential of each town will be investigated based on the "Growth Potential of Towns in the Western Cape" research study undertaken by the Department of Environmental Affairs and Development Planning.

During the study the most recent IDP was assessed and the qualitative component of the study was divided into two phases: a round-table discussion with specific stakeholders and a broader public participation process in Prince Albert. According to this study the Prince Albert Municipal area has a low development potential as can be seen on **Figure 52** below.

Figure 52 | Growth Potential of Towns (Source: Growth Potential of Towns in the Western Cape 2009)



6.4.1.1.1 Prince Albert

The economy of the town relies on the agriculture and tourism sectors. According to the Growth Potential of Towns study Prince Albert has a low economic potential, see **Table 23** below.

Table 23 | Growth Potential of Prince Albert[109]

Town	Economic	Natural	Infrastructure	Institutional	Combined
Prince Albert	Low	Very Low	Low	Medium	Low

The Prince Albert Local Economic Development Strategy document should also be taken into consideration as it identifies the strengths of Prince Albert which could increases the growth potential of Prince Albert. The identified strengths are:

- The Karoo brand is increasingly popular and known
- Natural beauty environment that can attract tourists (best Karoo experience?)
- Swartberg pass, Gamkaskloof, Meiringspoort, vastness of the Great Karoo
- Close proximity to Cango Caves, ostrich farms
- Many potential customers drives through N1 and N12
- Popular place for adventures sports, cycling routes and hiking trails
- Small charming town with interesting people with interesting stories
- The established tourism sector with potential to grow
- Some good producers of quality goods – for export, won awards
  - Avoova for e.g. uses ostrich shell to manufacture world class products (50 jobs)
- Good intellectual capital and entrepreneurs
- Some entrepreneurs are willing to mentor businesses
- Willingness of local municipality
- Established infrastructure
- Sufficient water (but insufficient storage capacity)
- Availability of labour
- Solar energy that could complement electricity[110]

Spatial Integration

The current spatial form still strongly reflects the history of the town and past patterns of development. According to members of the Prince Albert community, the linear structure of the town is entirely determined by the highest contour along which water can be gravity fed to the lower lying erven and floodplain. The North End neighbourhood is currently spatially separated from Prince Albert town. The municipality currently plans to develop sport and recreational facilities which will assist in bringing the spatial divide.

[109] UNIVERSITY OF STELLENBOSCH. 2009. Growth Potential of Towns in the Western Cape. p. 66
[110] DEDAT. 2013. Prince Albert Economic Development Strategy Document. p.13

Land Use

The development of the town took place in very strong patterns that still reflect historical development trends and patterns.

The land uses as reflected on **Map 26** below can be summarized as follows:

1. Church Street remains the dominant spine along which the town developed and represents the CBD of Prince Albert. The CBD exhibits a strong linear pattern and stretches over approximately 2km. The CBD is easily accessible to both the North and South End of Prince Albert. The fact that business development failed to penetrate along other arterials, is a reflection of the dominance of Church Street and the lower levels of traffic carried by the other routes.
2. Prince Albert has large areas of residential use, a low level of commercial (mainly tourism related) activities and very little to no industrial activity.
3. Education facilities are well distributed with two Grade 1-12 schools and another Grade 1-9 school situated in Prince Albert town and North End.
4. There is a clinic in North End and a hospital in Prince Albert town.
5. There are various town farms situated within Prince Albert, which gives a unique character to the town.
6. The Robert Gordon Koppie conservation area is located towards the western side of Prince Albert.

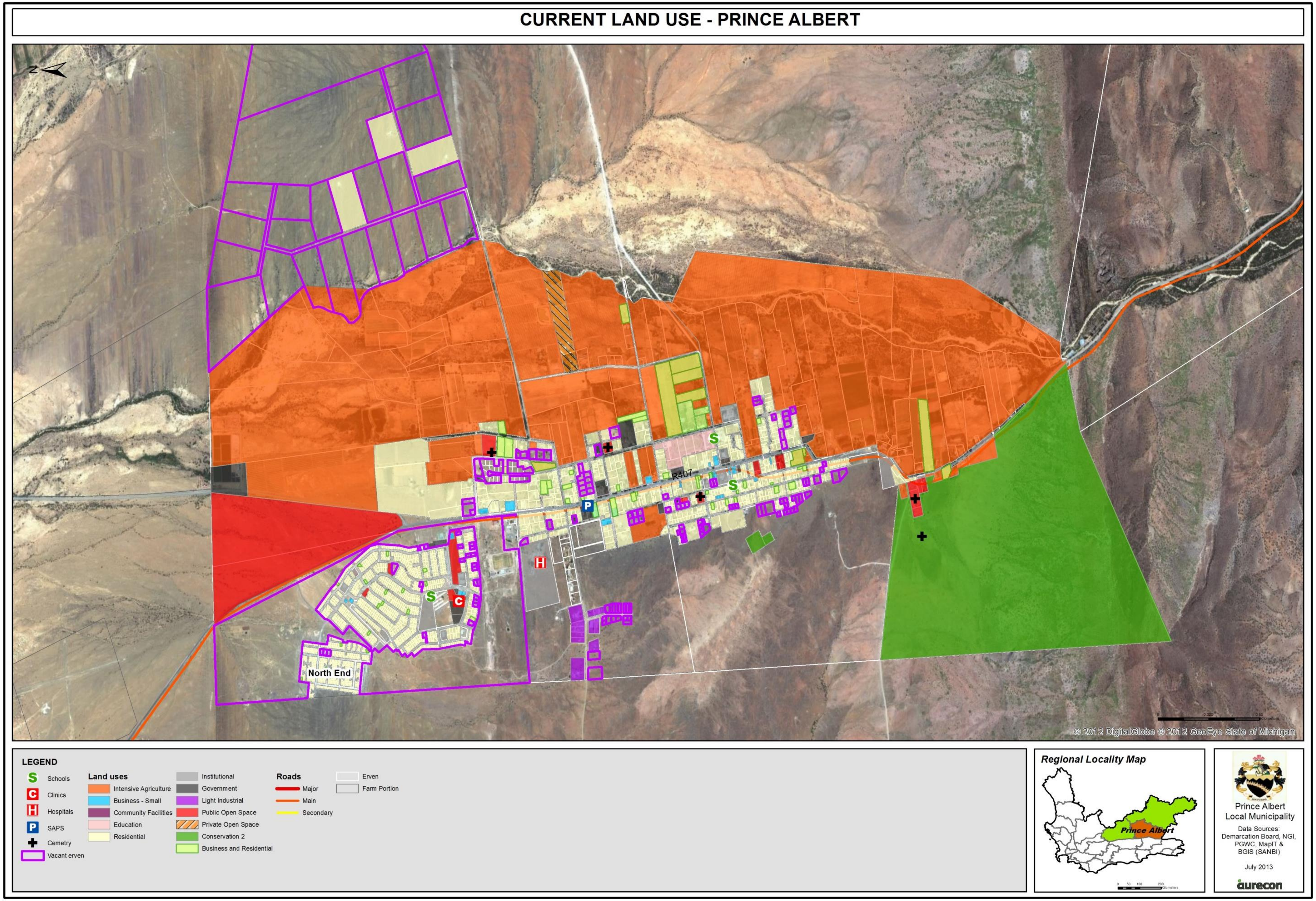
Ownership

As shown on **Map 27,** the majority of Prince Albert is privately owned, with some municipal owned land towards the west and some state owned properties.

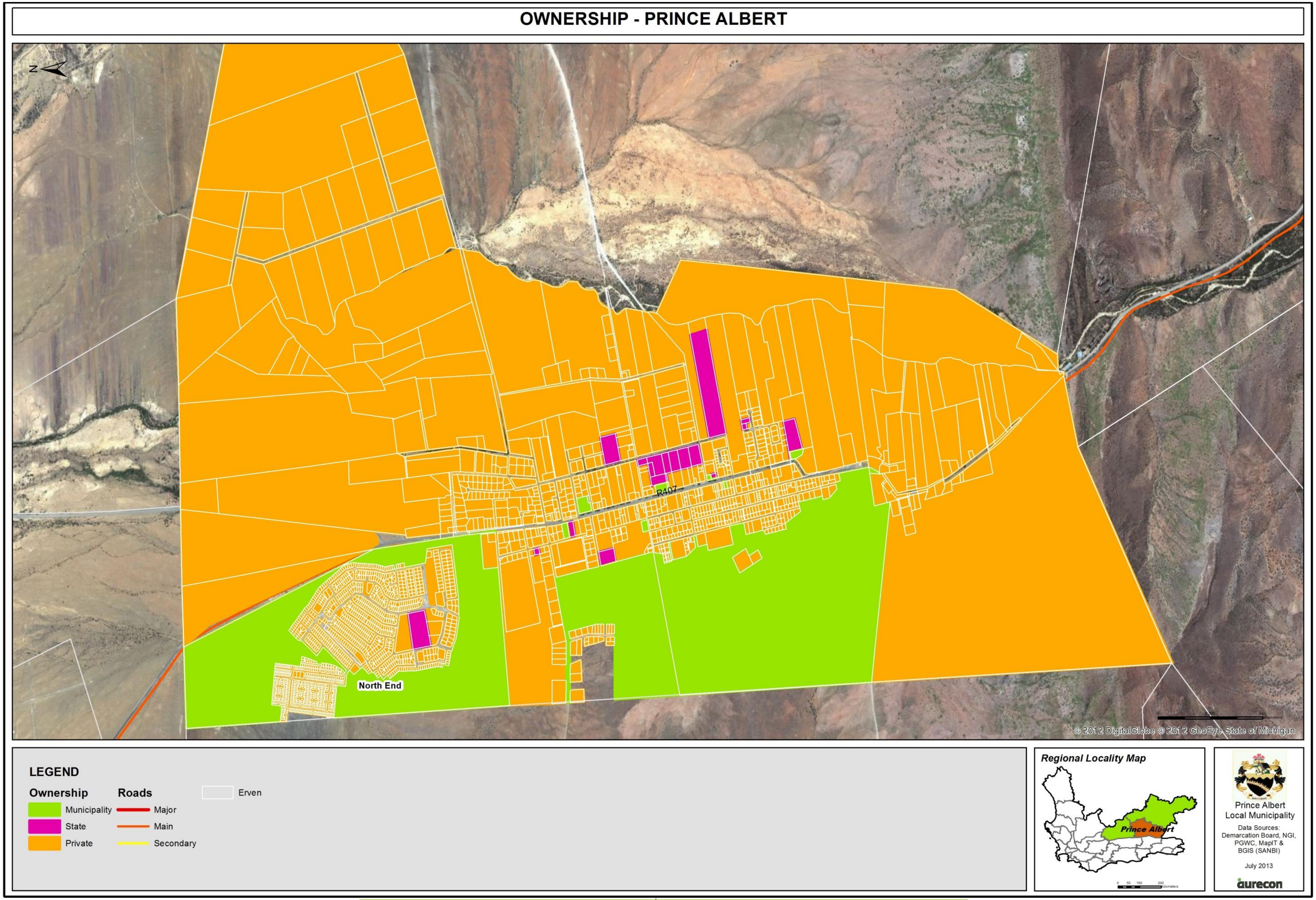
Commonage

There is still undeveloped commonage land towards the north western side of Prince Albert, see **Map 28** below. Accepting the growth rate of the town, the current urban structure should be sufficient to accommodate future growth. The Comprehensive Infrastructure Plan of Prince Albert indicates that the water sources of Prince Albert are adequate in the short and long term. The plan however also mentions that over-abstraction of the boreholes has previously taken place in Prince Albert, which together with drought conditions can lead to critical situations as far as the Prince Albert groundwater sources are concerned. Furthermore the plan indicates that the Prince Albert Waste Water Treatment Works is not adequate in the short or long term.[111]

[111] BKS (Pty) Ltd. 2011. Prince Albert Local Municipality: Comprehensive Infrastructure Plan. p. 107

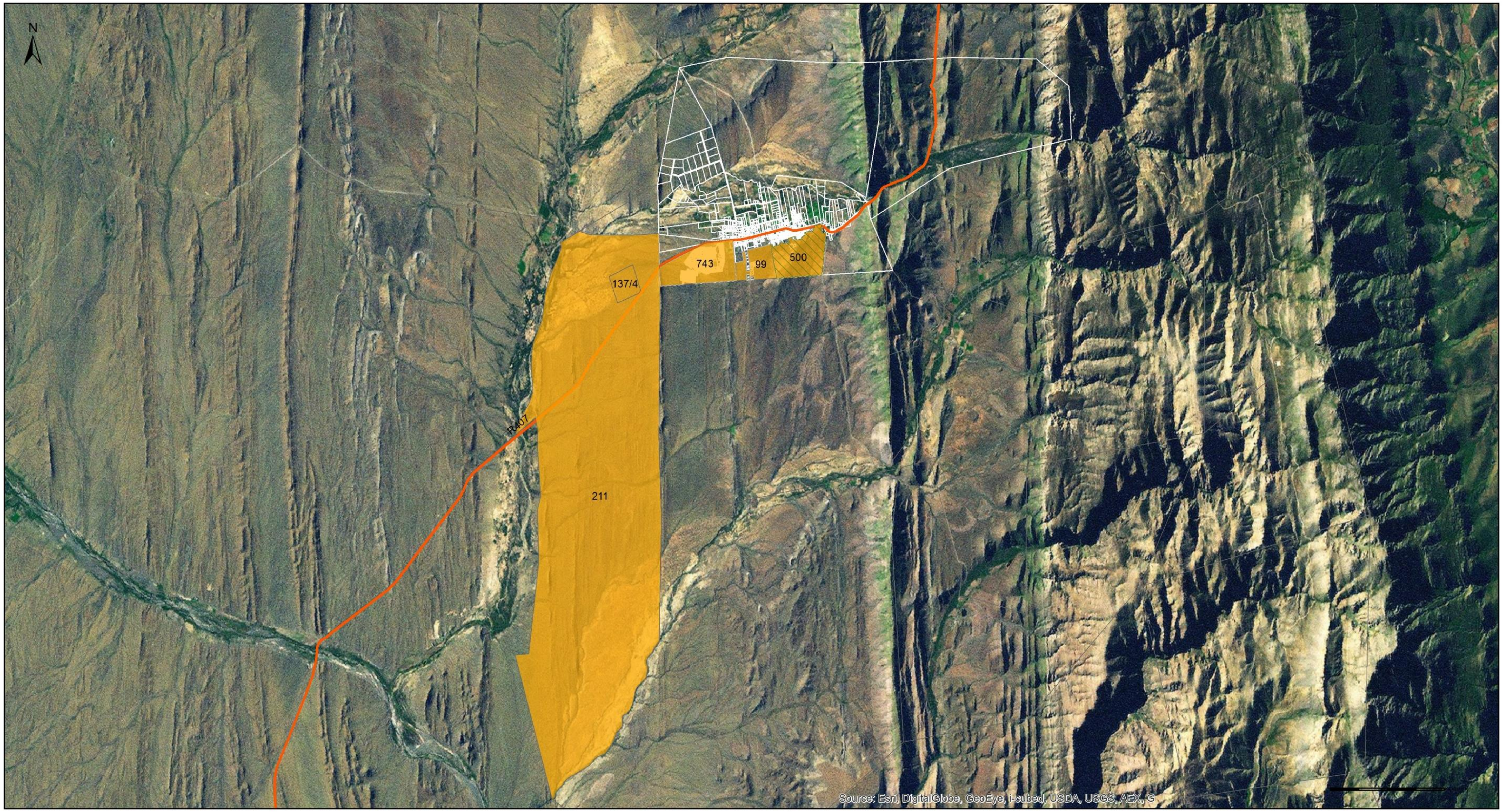


Map 26 | Prince Albert Land Use Map



Map 27 | Prince Albert - Ownership

COMMONAGE - PRINCE ALBERT



LEGEND

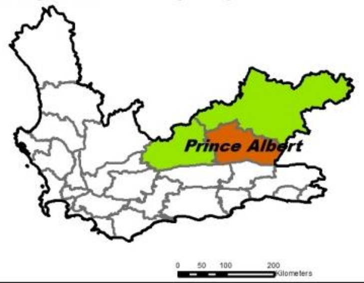
- Commonage
- Conservation (Robert Gordon Koppie)

Roads

- Major
- Main
- Secondary

- Erven
- Farm Portion

Regional Locality Map



Prince Albert Local Municipality

Data Sources: Demarcation Board, NGI, PGWC, MapIT & BGIS (SANBI)

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6.4.1.1.2 Leeu Gamka

Leeu Gamka's economy is largely made up of livestock and olive farming. According to the Growth Potential of Towns study, Leeu Gamka has a very low economic potential, see **Table 24** below.

Table 24 | Growth Potential of Leeu Gamka[112]

Town	Economic	Natural	Infrastructure	Institutional	Combined
Leeu Gamka	Very Low	Low	Low	Low	Low

The favourable locality of Leeu Gamka adjacent to the N1 and the ample vacant land available for future development should however be acknowledged.

Spatial Integration

The informal settlement Bitterwater is located on the north western side of the town and is another example of the fragmented planning that is associated with old apartheid modernist style. Unfortunately not much can be done to rectify this disjointed development because of the physical environment.

Land Use

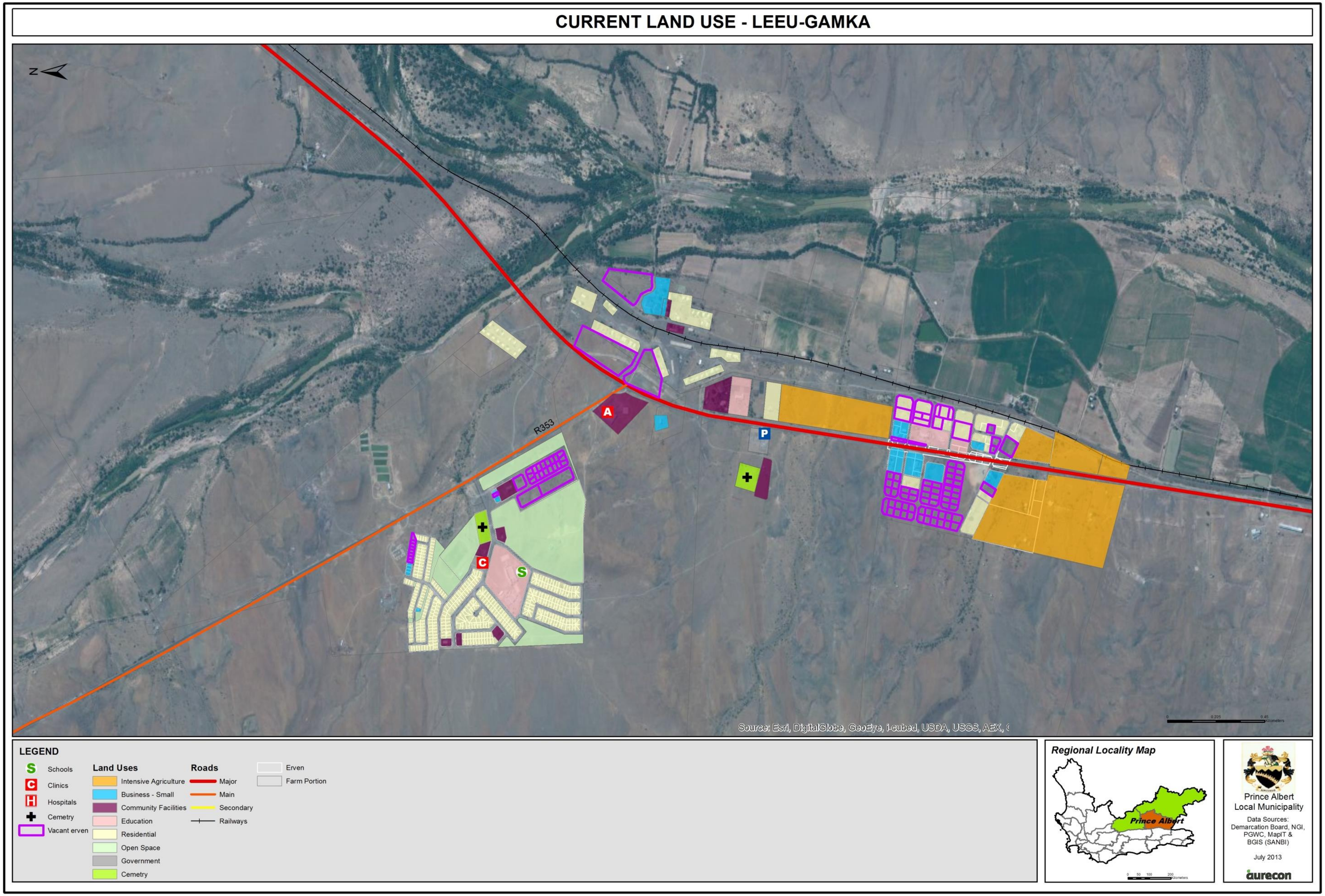
The land uses as reflected on **Map 29** below can be summarized as follows:

1. There are mostly residential uses in the town with only a few business uses. This is to be expected because most of the residents work on nearby farms or for Transnet.
2. The following facilities are provided in Leeu Gamka: A grade 1-9 school, a clinic, a police station and an ambulance station.

Ownership

As shown on **Map 30,** Leeu Gamka consists out of municipal owned properties towards the west and privately owned properties towards the east. Transnet (Pty) Ltd (private) is currently busy transferring the Leeu Gamka station property to Prince Albert Local Municipality.

[112] UNIVERSITY OF STELLENBOSCH. 2009. Growth Potential of Towns in the Western Cape. p. 66



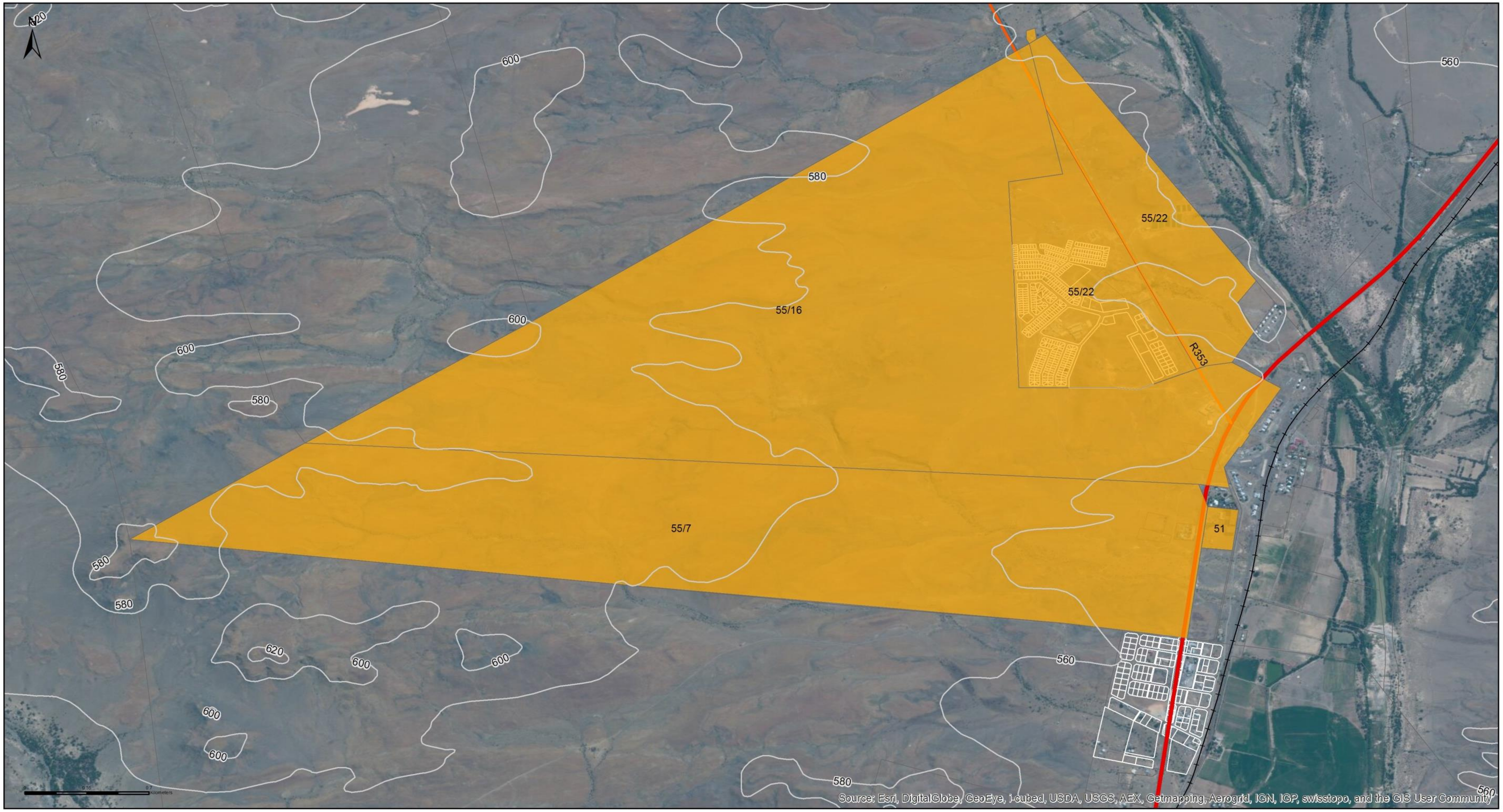
Map 29 | Leeu Gamka - Land Use Map

OWNERSHIP - LEEU-GAMKA



Map 30 | Leeu Gamka - Ownership

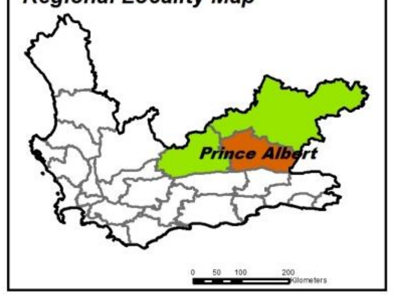
COMMONAGE - LEEU-GAMKA



LEGEND

Commonage	**Roads**	Erven
	Major	Farm Portion
	Main	Contours
	Secondary	
	Railways	

Regional Locality Map



Prince Albert Local Municipality

Data Sources: Demarcation Board, NGI, PGWC, MapIT & BGIS (SANBI)

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6.4.1.1.3 Klaarstroom

The economy of the town currently relies on the agriculture sector. The favourable locality of Klaarstoom adjacent to the N12 and the ample vacant land available for future development should however be acknowledged as it increases the growth potential of Klaarstroom.

Spatial Integration

The informal settlement is located on the north western side of the town and is another example of the fragmented planning that is associated with old apartheid modernist style. Unfortunately not much can be done to rectify this fragmented development because of the physical environment.

Land Use

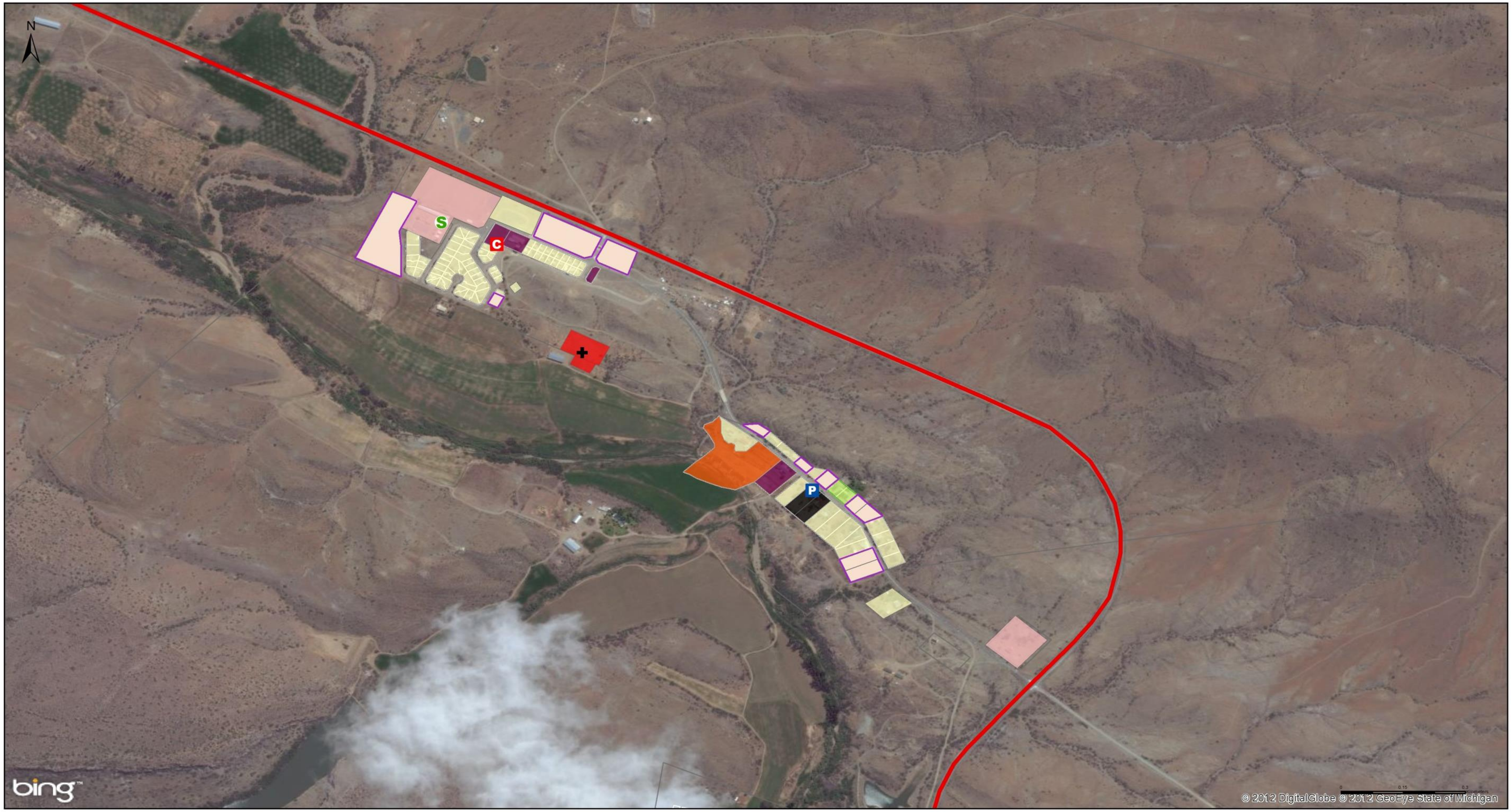
The land uses as reflected on **Map 32** below can be summarized as follows:

1. The R407 is the dominant spine along which the town develops. The CBD exhibits a linear pattern in Klaarstroom town. There is business development along this road and the road connects the main part of town to the informal settlement.
2. The informal settlement is located on the north western side of the main town. This settlement is located 0.8 km from the town's major activities. Currently the R407 is the only link between the areas, thus a fragmented town structure exists.
3. There is still undeveloped commonage land towards the northern and western side of Klaarstroom. Accepting the growth rate of the town, the current urban structure should be sufficient to accommodate future growth.
4. There are mostly residential uses in the town with only a few business uses. This is to be expected because most of the residents work on nearby farms.
5. The following facilities are provided in Klaarstroom: A grade 1-7 school, a clinic and a police station.

Ownership

As shown on **Map 33,** the majority of Klaarstroom is municipal owned, with private owned land towards the south and some state owned properties.

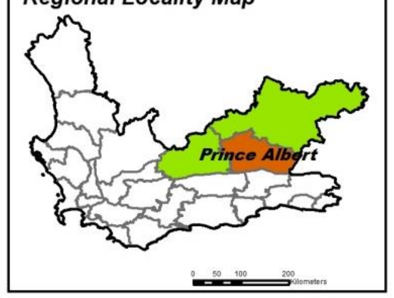
CURRENT LAND USE - KLAARSTROOM



LEGEND

S Schools	**Land uses**	Education	**Roads**	Erven
C Clinics	Business & Residential	Government	Major	Farm Portion
H Hospitals	Business - Small	Intensive Agriculture	Main	
✚ Cemetry	Cemetry	Residential	Secondary	
Vacant erven	Community Facilities			

Regional Locality Map



Prince Albert
Local Municipality

Data Sources:
Demarcation Board, NGI,
PGWC, MapIT &
BGIS (SANBI)

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Map 32 | Klaarstroom - Land Use Map

OWNERSHIP - KLAARSTROOM



LEGEND

Ownership	Roads	
Municipality	Major	Erven
State	Main	Farm Portion
Private	Secondary	

Regional Locality Map



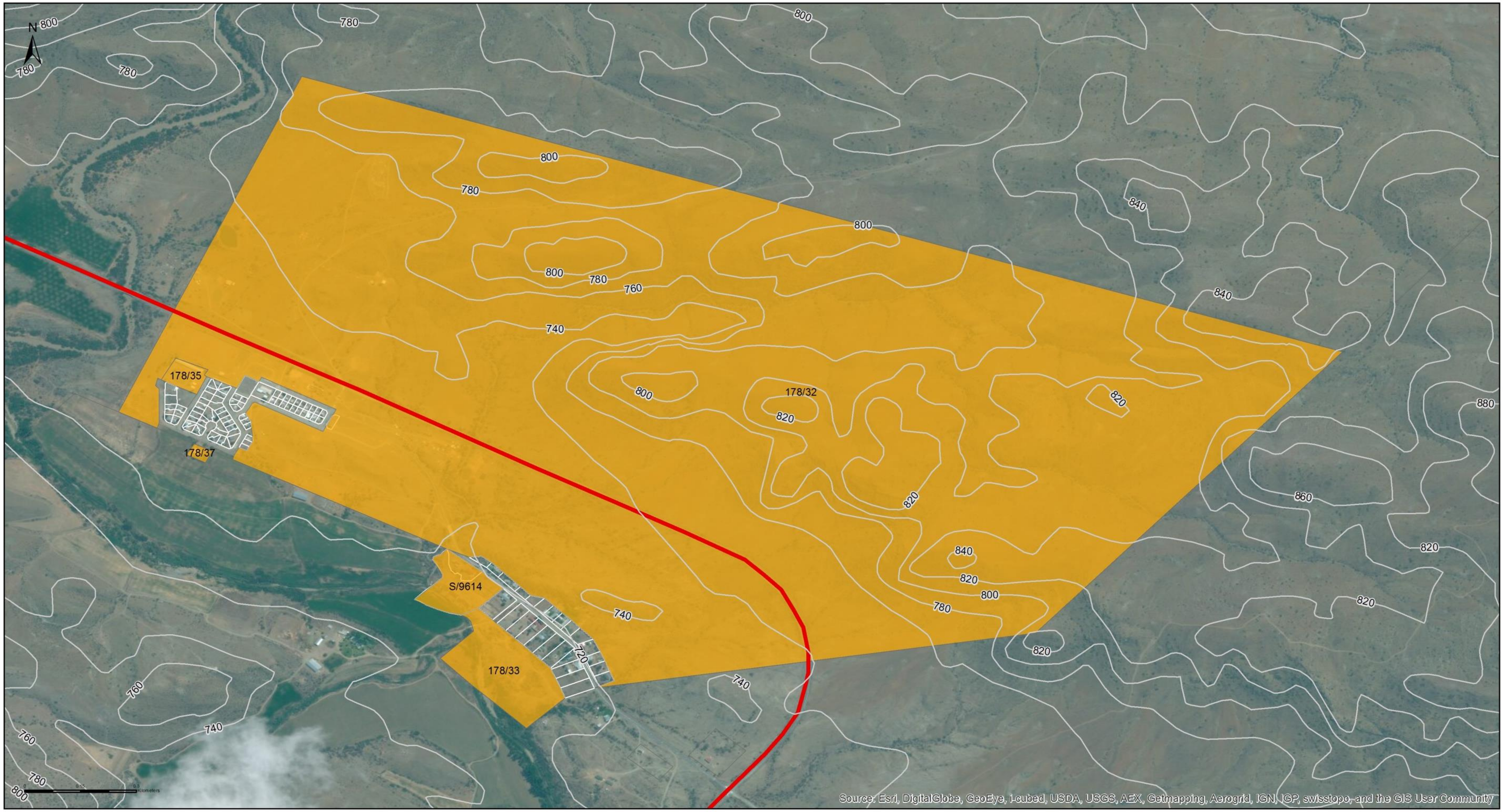
Prince Albert Local Municipality

Data Sources: Demarcation Board, NGI, PGWC, MapIT & BGIS (SANBI)

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COMMONAGE - KLAARSTROOM



LEGEND

Commonage	**Roads**		Erven
	Major		Farm Portion
	Main		Contours
	Secondary		



Prince Albert
Local Municipality

Data Sources:
Demarcation Board, NGI, PGWC, MapIT & BGIS (SANBI)

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Map 34 | Klaarstroom - Commonage

6.4.1.1.4 Prince Albert Road

Prince Albert Road is located adjacent to the N1 which opens up economic opportunities.

Land Use

The land uses as reflected on **Map 35** below can be summarized as follows:

1. Prince Albert Road is a residential town with only one or two businesses.
2. There are no facilities provided in Prince Albert Road.

Ownership

Prince Albert Road is owned by Transnet (Pty) Ltd. Transnet (Pty) Ltd is however currently busy transferring Prince Albert Road to Prince Albert Local Municipality.

Implications for Prince Albert Local Municipality:

- Based on the before mentioned it is proposed that future low cost residential development should be carefully considered based on best practice sustainability principles.
- It is proposed that developments in the town and settlements of Prince Albert Local Municipality be strategically located as a means to bridge the spatially fragmented town structures that exist.

CURRENT LAND USE - PRINCE ALBERT ROAD



LEGEND

S Schools	**Land uses**	**Roads**	Erven
C Clinics	Business - Small	Major	Farm Portion
H Hospitals	Residential	Main	
Cemetry		Secondary	
Vacant erven		Railways	

Regional Locality Map



Prince Albert Local Municipality

Data Sources: Demarcation Board, NGI, PGWC, MapIT & BGIS (SANBI)

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Map 35 | Prince Albert Road - Land Use Map

6.4.2 Tourism

Map 36 below gives a visual interpretation of some of the tourism attractions situated within the borders of Prince Albert Local Municipality. The following attractions are situated along the Swartberg Pass Circle Route:

- Prince Albert
- Klaarstroom
- Meiringspoort
- Swartberg Pass
- Gamkaskloof
- Weltevrede Valley

In addition to the rich heritage of Prince Albert mentioned previously in the document there is an extensive list of tourist attractions situated in and around Prince Albert which attracts local and foreign tourist. Prince Albert hosts various activities, events, tours and courses in and around the town, such as:

- Astro Tours
- The African Relish – Recreational Cooking School
- Bushman Valley – Seven hiking trials, including dry waterfall, bushman shelters, bushman museum, etc.
- Saturday Markets
- A annual Olive Festival
- La Vida Beauty Spa
- Farm visits, which includes olive, wine, dairy, fig and fruit farms, etc.

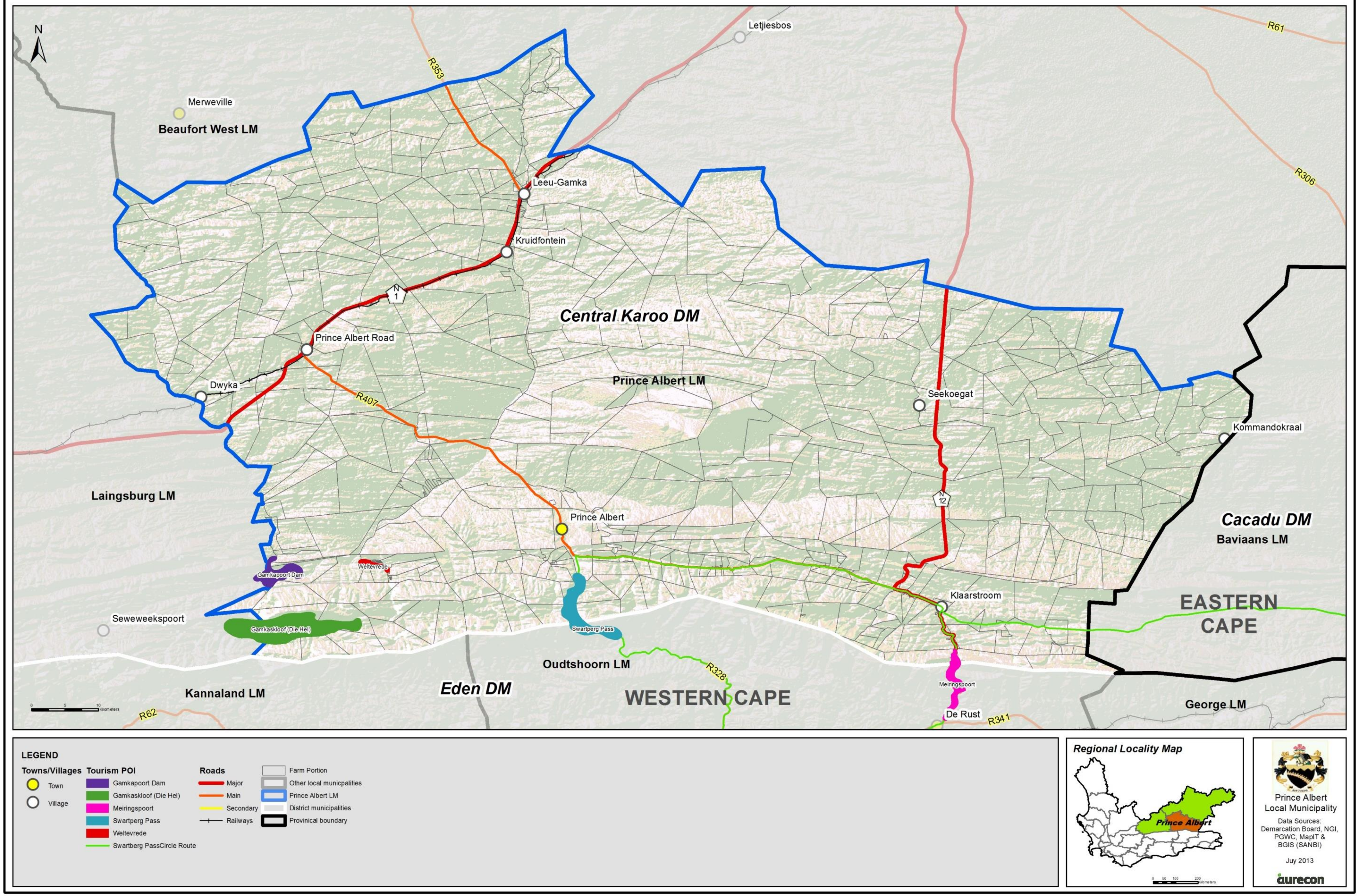
The well established and up to date Prince Albert Tourism website (http://www.princealbert.org.za) provides a comprehensive overview of the various activities, events, tours and activities mentioned above and the various available accommodations and dining experiences available in Prince Albert.

Prince Albert was awarded the winners in the 2012 Western Cape "town of the year" competition, hosted by the television program Kwêla. Furthermore the new reality cooking program Kokkedoor is also filmed in Prince Albert with local competitors.

Implications for Prince Albert Local Municipality:

- It is proposed that the "Diversify tourism product/ Promote increase in Agri-Tourism" strategic initiative and the "Branding and Marketing" strategic initiative identified in the Prince Albert Local Economic Development Strategy Document be implemented.

TOURISM - PRINCE ALBERT LM



6.4.3 Services and infrastructure

Services and social infrastructure is the key to development. A constrained or underperforming services environment does not contribute to sustainable development. The availability of services that meets the expected performance criteria and access to these services, are prerequisites for social and economic development.

Development and also the level of development, is a function of accessibility. Remoteness and isolation never promotes and enhances development. Access to facilities and opportunities sustain development. Spatially transportation networks and facilities play and important role in development.

The dominant development potential is strengthened or weakened by its accessibility and links with the broader development environment. Access and functional linkages are described by:

- Road, rail and air links.
- The mode of transport utilised by households.
- The accessibility of Regional and Local Service Centres.
- The functional service area of the urban areas.

6.4.3.1 Roads

According to the Prince Albert Local Municipality IDP (2012-2017) the total amount of roads in the municipality adds up to 1 741.2 km. The total amount of roads comprise of 257.6 (14.8%) km of surfaced roads and 1 483.6 (85.2%) km of gravel roads.

The following are indication of key distances and travel times calculated with Google maps:

- Along the R407(tar road), the driving distance between Prince Albert and Prince Albert Road is about 45 km and takes 40 minutes driving time.
- From Prince Albert to Leeu Gamka via the R353 (gravel road) it is a 57km drive taking approximately 50 minutes or via the R407(tar road) it is a 86 km drive of approximately 65 minutes' drive.
- Along the R407(tar road), the driving distance between Prince Albert and Klaarstroom is about 53 km and takes 45 minutes driving time.
- Oudtshoorn, were most of the residence of Prince Albert do their shopping, is 111km away from Prince Albert taking approximately 86 minutes to drive via Klaarstroom. Another option is the 71 km route to Oudtshoorn via the Swartberg Pass (gravel road) taking approximately 40 minutes.
- The largest Urban Centre close to the Local Municipality is Cape Town. It is a 392 km drive, taking 4 hours when driving along the N1.

Furthermore some private air landing sites exists in Prince Albert Local Municipality, see map above.

Public Transport[113]

During the public participation workshops held as part of the Local Integrated Transport Plan process the following main issues was identified:

- Access to inter-town transport to education and medical facilities.
- Due to poverty, most residents are stranded with respect to shopping and social trips.

Prince Albert Road, Klaarstroom and Leeu-Gamka do not have access to any formal public transport services. The only existing formal public transport service within the borders of Prince Albert Local Municipality is situated in Prince Albert. Prince Albert has two minibus-taxi operators who provide a service from the residential area to town. Infrequent long-distance minibus-taxi services are available to go to Oudtshoorn, George and Cape Town.

[113] CSIR. 2009. Prince Albert Local Municipality Local Integrated Transport Plan (2009 – 2013). p.5

The residents of Prince Albert Road have to hire private vehicles for long-distance trips. In Leeu-Gamka, residents have to arrange with the Beaufort West minibus-taxi operators for a specific taxi journey. Klaarstroom has an existing taxi rank, but is almost exclusively used on social grant payout days. Residents have to phone to pre-book a seat for a minibus-taxi journey to Oudtshoorn.

Non-motorised Transport[114]

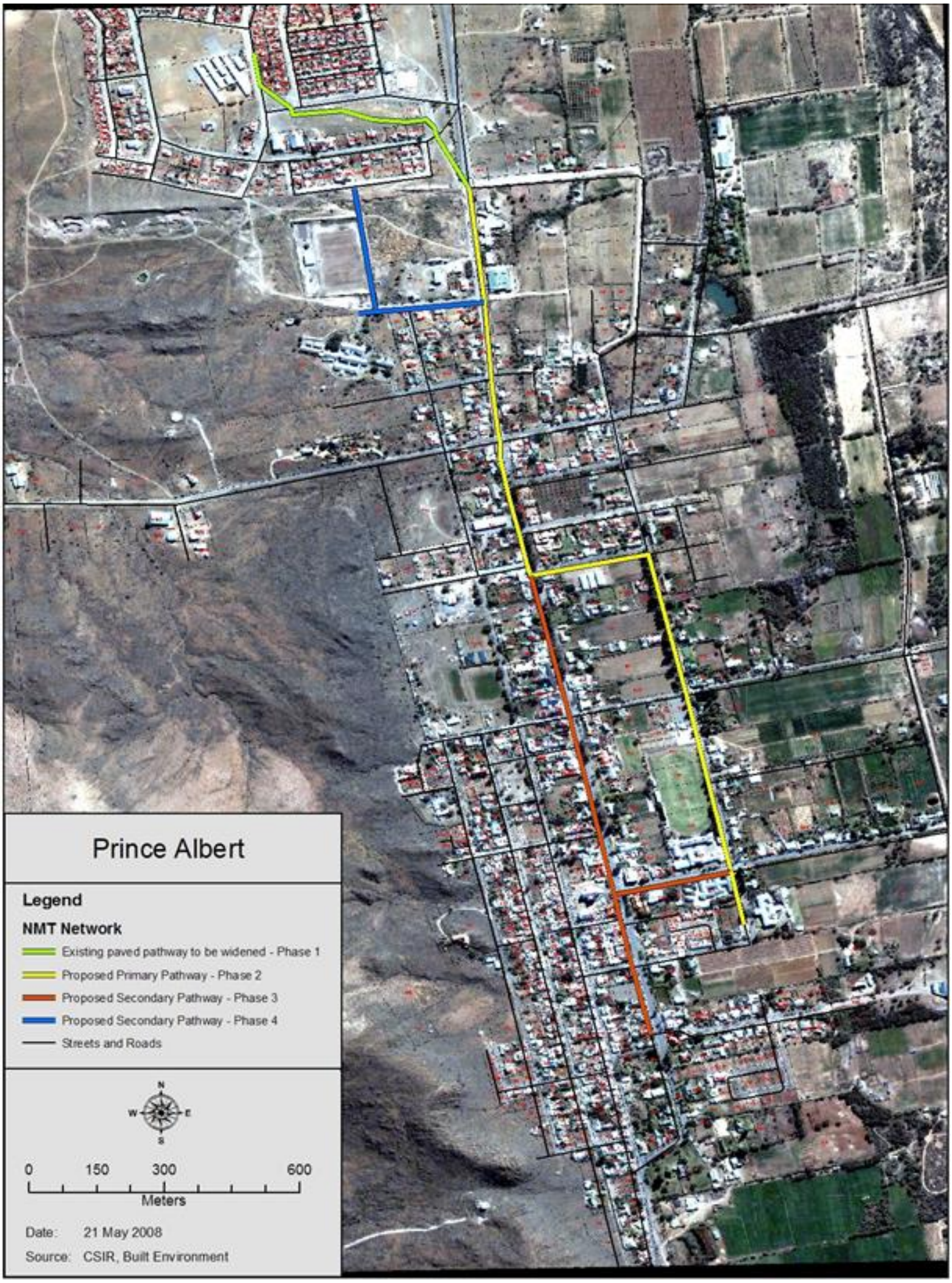
According to the Local Integrated Transport Plan (2009-2013) there are currently two existing non-motorised transport systems within the borders of Prince Albert Local Municipality.

The one pedestrian and cycle path is situated in Leeu-Gamka and runs underneath the N1. However, the path is a stand-alone system and has no linkages to the railway station or the township of Bitterwater. The lighting in the tunnel has also been vandalized, thereby creating a safety concern.

The other non-motorised transport (NTM) system is situated in Prince Albert. A pedestrian and cycle path stretches from the local primary school in the North End suburb to the Main Road (R407). This pathway has no other linkages to the rest of the town, based upon the before mentioned a phased approach to extend the pathway to the rest of the town is proposed, see **Figure 53** below. This NMT system should be developed in terms of the Department of Transports Pedestrian and Bicycle Facility Guidelines especially, if alongside roads which fall within the management of Province.

[114] **CSIR. 2009. Prince Albert Local Municipality Local Integrated Transport Plan (2009 – 2013). p.6**

Figure 53 | Non-motorised phased implementation plan for Prince Albert[115]



[115] **CSIR (2008) Karoo Mobility Project: Implementation Plan for a Community Mobility Service and Non-Motorised Transport Interventions, as developed by KV3 Engineers 231450FS0 Technical Report.**

Public Transport and Low -Cost Housing

The demand for transport is driven by the need for people to reach locations where activities take place, including the workplace, schools, hospitals and clinics. Therefore, effective land-use planning is vital, as it determines where major facilities and human settlements are located, how far people have to travel to access such facilities, and what households and government spend on transport. The current public transport system is expensive, inefficient, ineffective and inaccessible, which contributes to the rise of poverty levels.

Transport Projects[116]

The Local Integrated Transport Plan (2009 – 2013) of Prince Albert Local Municipality identified the transport related projects for implementation as shown in **Table 25**:

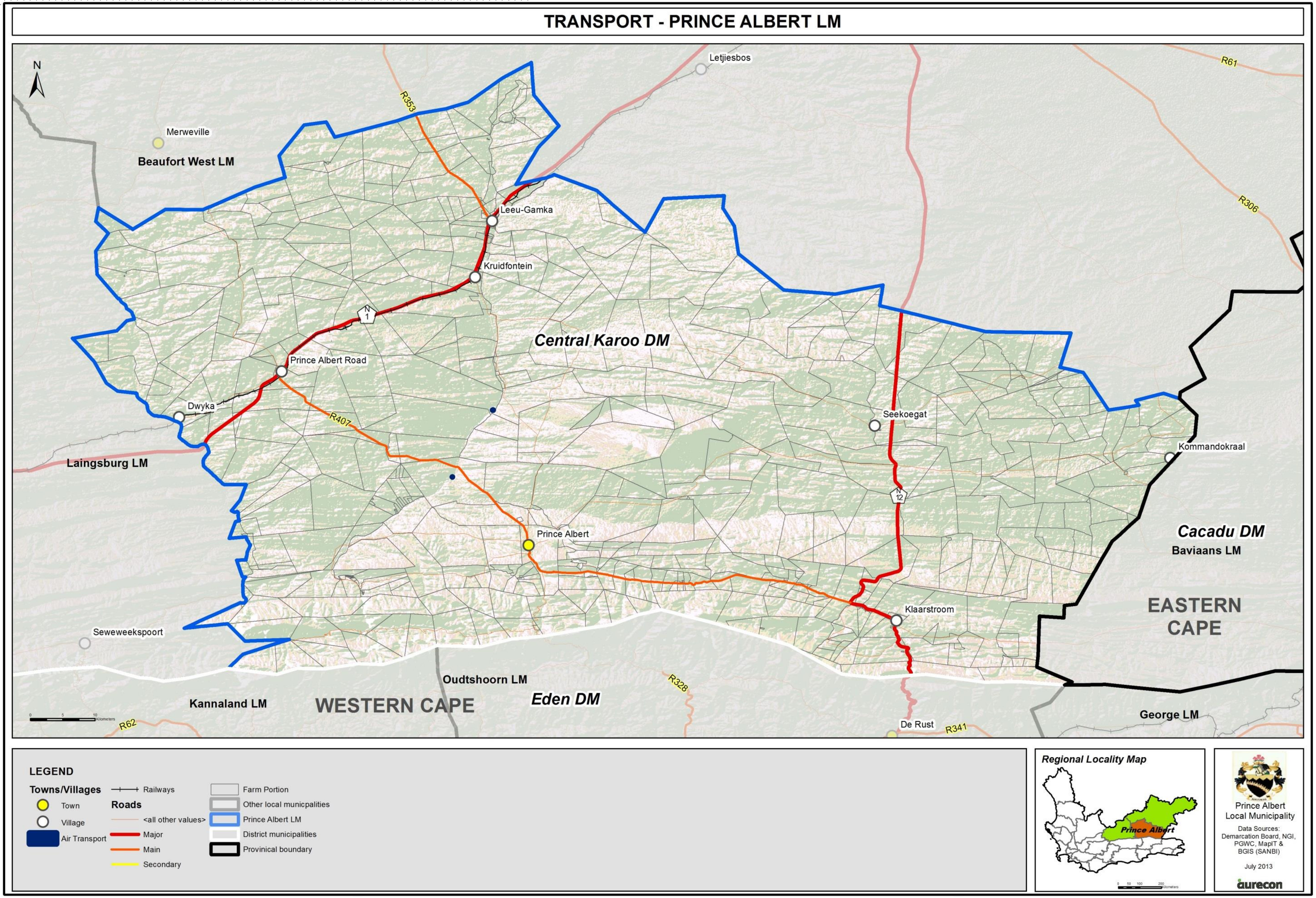
Table 25 | Transport Projects

Project	Type of Project	Locality
Project 1:Paved roads and sidewalks for Prince Albert, Leeu-Gamka and Klaarstroom	Upgrading	Prince Albert Local Municipality
Project 2: Construction of roads in Prince Albert	Upgrading	Prince Albert Local Municipality
Project 3: Rehabilitation of primary access roads	Upgrading	Prince Albert Local Municipality
Project 4: Rehabilitation of Storm water crossing	Upgrading	• Prince Albert - Muisvoël Street (378m) • Prince Albert - Tortelduif Street (146m) • Prince Albert - Kanarrie Street (433m) • Leeu Gamka - Granaatbos Street Ph1 (218m)

Implications for Prince Albert Local Municipality:

- The Leeu Gamka community identified the issues of “The deaths of pedestrians crossing the N1” during the “Issues and Vision” workshop, the underpass is thus seen as unsuccessful. It is therefore proposed that the underutilization of this underpass be investigated.
- Compact and integrated developments should be encouraged, which promotes an efficient public transport system and encourage walking and cycling.

[116] CSIR. 2009. Prince Albert Local Municipality Local Integrated Transport Plan (2009 – 2013). Annexure A



Map 37 | Transport Infrastructure

6.4.4 Access to Services

The White Paper on Spatial Planning states that "there must be a strong link between both the [Spatial] Plan and the [Land Use Management] Scheme and the Local Municipality's Budget and Capital Expenditure Framework."[117] Within the context of the SDF, the following interrelated aspects are important:

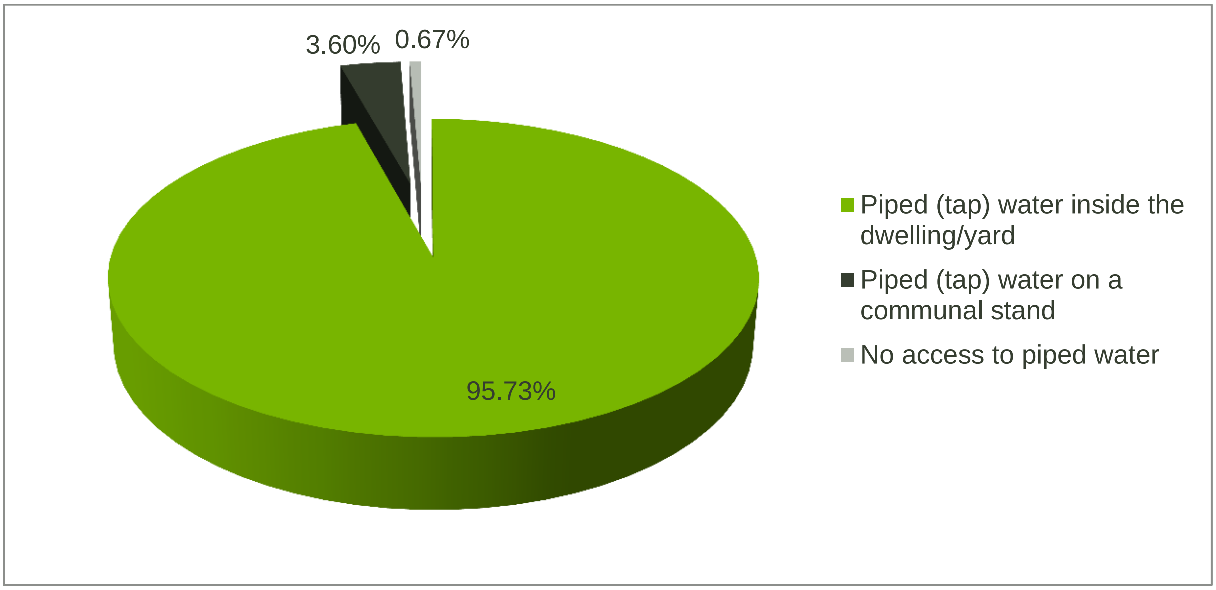
- In the budget, the consequences of land and land use management is reflected through property taxes as a source of income based on the value of land as brought about by its use and rights attached to land, and
- All existing land or, any new land development or land use changes have to be adequately serviced by infrastructure in order to sustain development through the social and economic processes linked to land.

This section looks at service delivery within the municipal area.

6.4.4.1 Access to water services

It is clear from **Figure 54** that the Municipality was successful in eradicating the water backlogs in the area. A backlog of only 0.67% is captured. It is acknowledged in the Prince Albert Local Municipality IDP (2012-17) that the provision of services in areas such as Prince Albert, Leeu-Gamka and Klaarstroom is sub-standard. Service infrastructure is either insufficient or old infrastructure exists.

Figure 54 | Water services and backlogs 2011[118]



[117] SOUTH AFRICA. Ministry of Agriculture and Land Affairs. 2001. White Paper on Spatial Planning and Land Use Management: Wise Land Use. July 2001
[118] STATISTICS SOUTH AFRICA. 2012. Census 2011 Municipal report Western Cape.p.85

6.4.4.1.1 Prince Albert

Bulk water infrastructure[119]

In the past the Dorps River was the sole water supply of Prince Albert. After experiencing an ongoing water shortfall in Prince Albert a series of boreholes were drilled. The nine boreholes are owned and operated by Prince Albert Local Municipality.

The abstraction from the Dorps River is as per the agreement between the Prince Albert Local Municipality and Kweekvallei Irrigation Board (KIB), of which the latter manages the abstraction from the Dorps River. This agreement stipulates that the Prince Albert Local Municipality receives 10.4% of the total volume of the water abstracted. The Dorps River is the only surface water source utilised in the Prince Albert Local Municipality for potable water supply and also supplies irrigation water to Prince Albert. The Dorps River supplies roughly about 28.5% of the total water demand of Prince Albert. Both the ground and surface water sources are registered with the DWA. **Table 26** provides a summary of the Prince Albert water infrastructure as shown in **Map 38** below:

[119] **BKS (Pty) Ltd. 2011. Prince Albert Local Municipality: Comprehensive Infrastructure Plan - Bulk Water and Sanitation. 87-91 p.**

Table 26 | Prince Albert: Water Sources

Description	Depth (m)	Normal rainfall years			Drought years		
		Yield (l/s)	Recommended supply (kl/day) (Recommended operation) (hrs./day)		Yield (l/s)	Recommended supply (kl/day) (Recommended operation) (hrs./day)	
			Winter	Summer		Winter	Summer
Surface Water Sources							
Dorps River	N/A	N/A	1450	764	N/A	1050	764
Groundwater Sources							
SRK 3	90	6.1	154 (7)	527 (24)	4.0	302 (21)	346 (24)
P1	200	3.5	88 (7)	302 (24)	1 – 1.5	113 (21)	130 (24)
P2	150	1.0	0 (0)	65 (18)	1.0	0 (0)	86 (24)
P3	50	6.3	158 (7)	540 (24)	4.0	302 (21)	346 (24)
P4	120	2.4	60 (7)	207 (24)	1.5	151 (21)	173 (24)
P5	90	5.3	0 (0)	401 (21)	3.0	0 (0)	259 (24k)
P6	120	1.5	0 (0)	0 (0)	1.5	0 (0)	130 (24)
P7	137	2.4	0 (0)	0 (0)	2.4	0 (0)	207 (24)
P8	55	1.1	0 (0)	0 (0)	1.0	0 (0)	0 (24)

The Bulk Infrastructure Master Plan 2011 made the following conclusions and recommendations with regards to the Prince Albert water sources:

- ***Over-abstraction of the boreholes has taken place in Prince Albert, which together with the drought conditions can lead to a critical situation as far as Prince Albert groundwater sources are concerned.*** Thus it is advised that water restrictions be implemented and borehole abstraction rates dropped based on the recommendations for drought conditions.
- Numerous boreholes are not operating optimally due to a lack of maintenance, and therefore it was recommended that the correct O&M measures be implemented.
- There is a current lack of adequate groundwater management by Prince Albert Local Municipality and it is advised that the groundwater management recommendations set out in the Groundwater Management and Artificial Recharge Feasibility Study (Groundwater Africa, 2007) be implemented immediately.
- The Prince Albert Local Municipality must ensure that the surface water allocation, as per the agreement between the municipality and the Kweekvallei Irrigation Board, has been implemented accordingly.
- The PAM must ensure that the groundwater is not pumped to the reservoirs during its allocation to prevent overflowing of reservoirs.
- Existing wet fields are being utilised to the aquifer's capacity, and in times of drought in excess of the aquifer's capacity. It is, therefore, recommended that the Prince Albert Local Municipality construct the artificial recharge scheme for the P 5 and P 7 wet field areas as recommend by replenishing groundwater supply.

Water Treatment Works[120]

The Prince Albert WTW receives raw water from nine different boreholes as well as the Dorps River. Occasionally the water received from the boreholes is iron rich in which case the water first pass through the iron remover before it gravitates to the raw water reservoir. The raw water is then pumped into the two balancing dams where after it is treated by means of four sand-filters and a chlorination process. **Table 27** below provides a summary of the mentioned WTW:

Table 27 | Prince Albert: WTW

Description	Prince Albert WTW
Capacity	Average 1280 kl/day, Peak 2560 kl/day
Operating hours per day	24
Compliance to standard	Poor
Is abstraction recorded?	Yes
Is abstraction registered with DWA?	Yes
Type of plant (description)	Chlorination

[120] BKS (Pty) Ltd. 2011. Prince Albert Local Municipality: Comprehensive Infrastructure Plan - Bulk Water and Sanitation. 87-91 p.

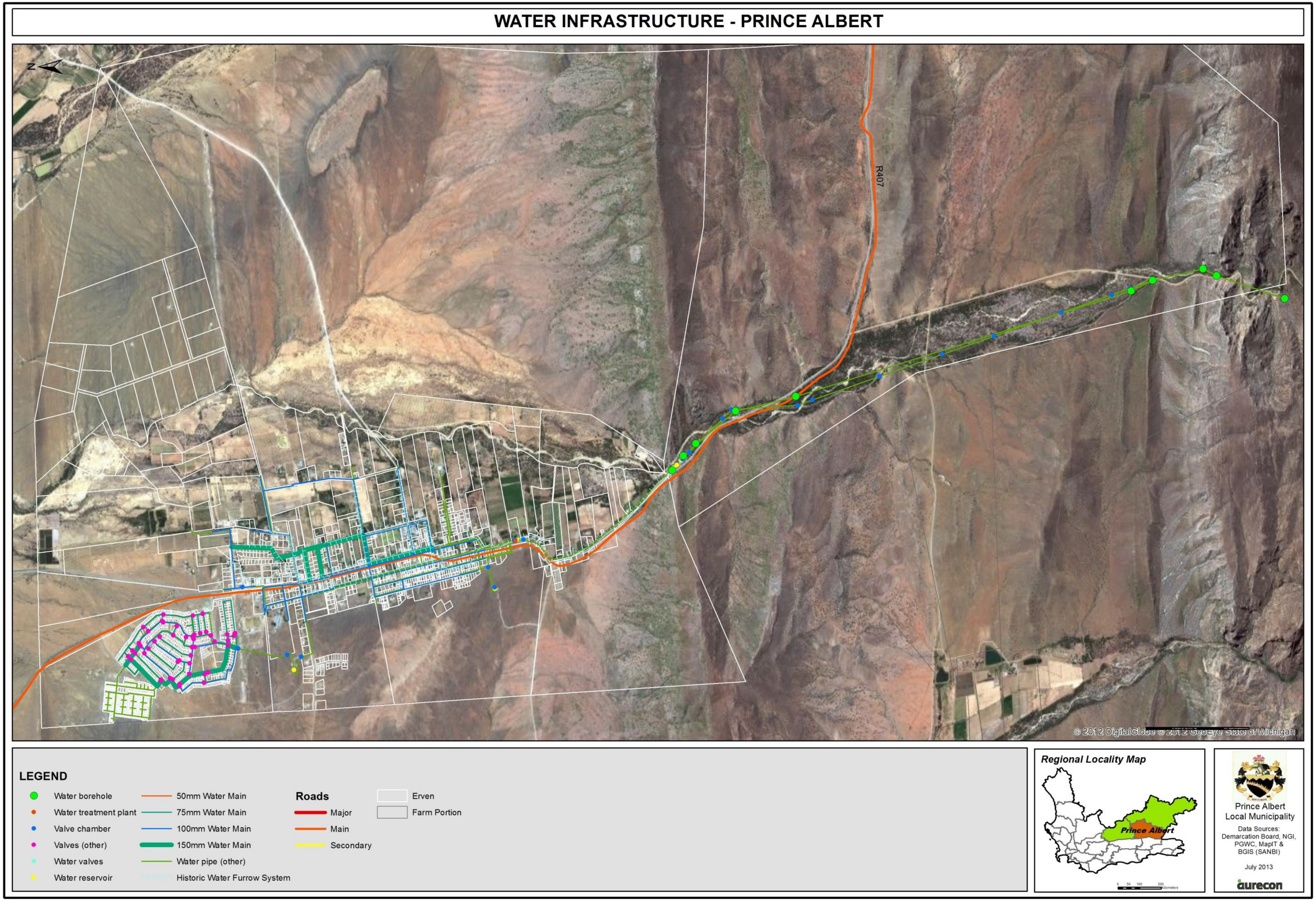
Service Storage[121]

There are four reservoirs situated in and around Prince Albert. Overall all four concrete reservoirs are in a reasonable condition and are used effectively. Their respective storage capacity is shown in **Table 28** below:

Table 28 | Storage Capacity – Prince Albert Local Municipality

Description	Klippies reservoir no 1	Klippies reservoir no 2	High Level reservoir	North End reservoir
Reservoir capacity (Ml)	1.000	0.500	0.500	1.000

[121] BKS (Pty) Ltd. 2011. Prince Albert Local Municipality: Comprehensive Infrastructure Plan - Bulk Water and Sanitation. 87-91 p.



Map 38 | Water Services – Prince Albert

1.1.1.1.1 Leeu Gamka

Bulk Supply Infrastructure[122]

Leeu-Gamka is solely dependent on groundwater resources. The potable water is abstracted from 3 boreholes sourced, see **Map 39**. LG1 and LG 2 two are both in an average condition and LG 2 in a poor condition. **Table 29** below provides a summary of the Leeu Gamka groundwater supply:

Table 29 | Leeu Gamka: Groundwater

Description	Depth (m)	Estimated Contribution	Recommended Yield (l/s)	Recommended supply (kl/day)	Recommended Operation (hrs./day)
LG 1	-	47%	1.4	120	24
LG 2	-	46%	1.4	120	24
LG 3	51	7%	0.2	17	-

The following conclusions and recommendations were made with regards to the Leeu-Gamka water sources:

- With Borehole LG 2 not working, Borehole LG 1 is facing possible failure as water levels are being drawn down to pump intake level every day.
- Leeu-Gamka will face severe water shortages if Borehole LG 1 fails and it was therefore advised that the flow rate of Borehole LG 1 be reduced and Borehole LG 2 be equipped with a new pump.
- Currently there is a lack of adequate groundwater management by Prince Albert Local Municipality and it is advised that the groundwater management recommendations set out in the report Groundwater Management and Artificial Recharge Feasibility Study (Groundwater Africa, 2007) be implemented.

Water Treatment Works

The Leeu-Gamka water is not treated by means of a formal WTW but a chlorination process. **Table 30** gives a brief summary of the level of service of the Leeu-Gamka chlorine facility:

Table 30 | Leeu Gamka WTW: Level of Service

Treatment works	Capacity	Staffing levels	Monitoring	Compliance to standard
Leeu-Gamka chlorine facility	Average 260 kl/day Peak 360 kl/day	Unacceptable	Acceptable	Poor

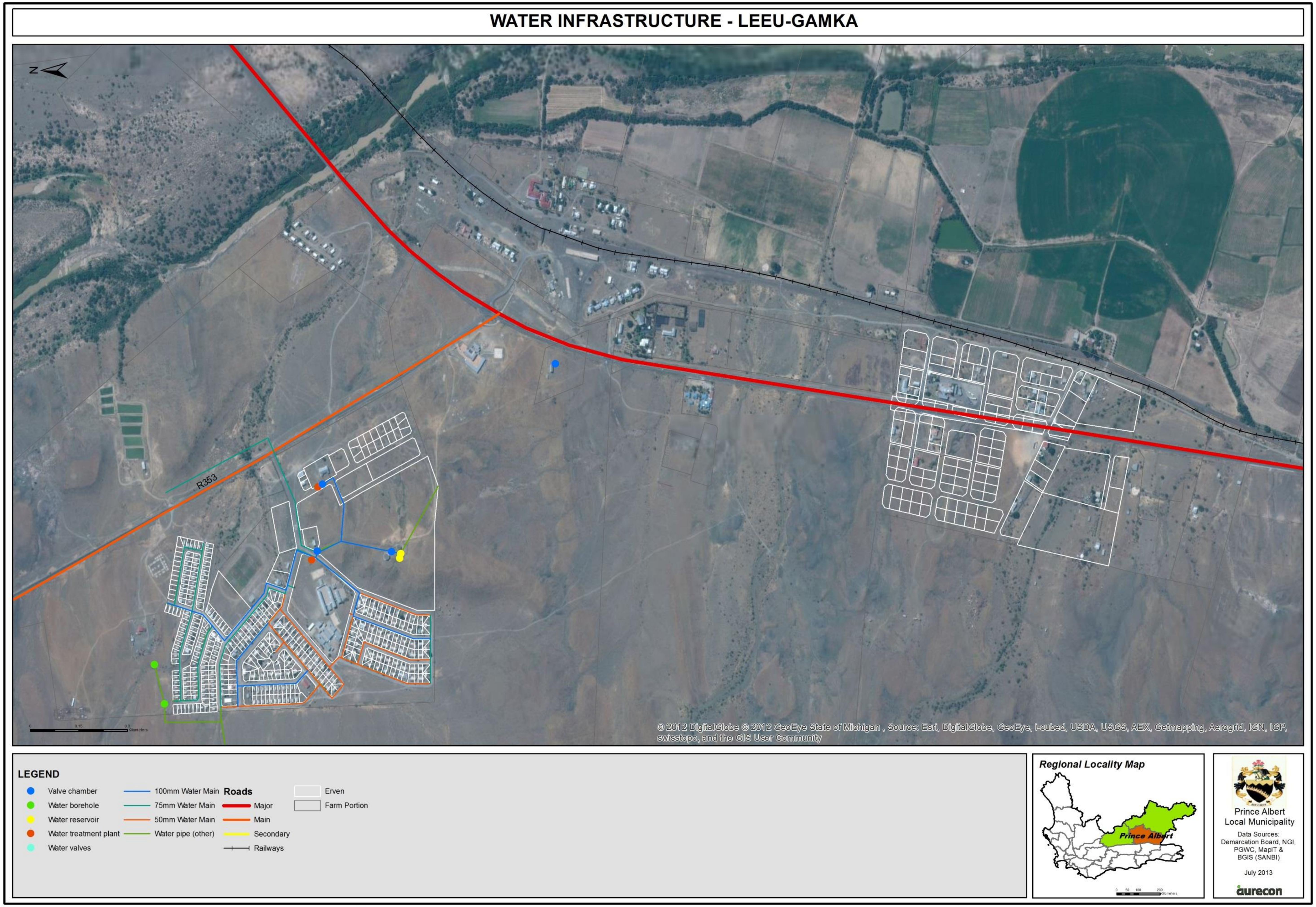
The future demand for Leeu-Gamka exceeds 360 kl/day; it is thus recommended that the Leeu-Gamka disinfection facility be extended to allow sufficient capacity to treat the projected demand for 2025 of 456 kl/day. The treatment provided must ensure that water supplied meet the required drinking water quality as per SANS 241.

[122] BKS (Pty) Ltd. 2011. Prince Albert Local Municipality: Comprehensive Infrastructure Plan - Bulk Water and Sanitation. 87-91 p.

Service Storage

There are two concrete reservoirs situated in Leeu-Gamka, one old reservoir at Bitterwater, with a capacity of 0.2 Ml and one newly constructed concrete reservoir with a capacity of 1 Ml. Both reservoirs are in a good to very good condition.

WATER INFRASTRUCTURE - LEEU-GAMKA



Map 39 | Water Services - Leeu Gamka

1.1.1.1.1 Klaarstroom

Bulk Supply Infrastructure[123]

Klaarstroom is supplied with potable water from two boreholes, see **Map 40** below. The two boreholes are well maintained and in good condition. **Table 31** below provides more information with regards to the mentioned boreholes:

Table 31 | Klaarstroom: Groundwater Infrastructure

Description	Depth (m)	Recommended Yield (l/s)	Recommended supply (kl/day)	Recommended Operation (hrs./day)
KS 1	75.0	0.5	43	24
KS 2	65.0	0.5	43	24

The current and historic abstractions from the Klaarstroom water sources could not be obtained from the PAM at the time of compiling this report. From Table 6.4 and the results of the previously mentioned studies, the following conclusions and recommendations were made with regards to the Klaarstroom water sources:

- The water levels of Boreholes KS 1 and KS 2 are close to the pump intake levels, it is advised that the Prince Albert Local Municipality make an effort to equip Borehole KS 3 for production as an additional 1.7 l/s can then be added to the Klaarstroom water supply.
- Due to the absence of local O&M skills, the boreholes should be equipped with a Global System for Mobile Communication (GSM)-based telemetry system.

Water Treatment Works

The raw water abstracted from KS1 and KS2 is pumped to the WTW. The Klaarstroom WTW operates for 24 hours a day and the quality of the water is tested on a quarterly basis. Currently the condition of the WTW cannot be described as good but rather that it is still in working condition. **Table 32** below describes the water treatment works of Klaarstroom:

Table 32 | Klaarstroom: Water Treatment Works Infrastructure

Treatment works	Capacity	Staffing levels	Monitoring	Compliance to standard
Leeu-Gamka chlorine facility	Average 260 kl/day Peak 360 kl/day	Unacceptable	Acceptable	Poor

Service Storage

The treated water is stored in a concrete panel reservoir with a capacity of 0.1 Ml and a newly constructed steel reservoir with a capacity of 0.2 Ml.

[123] BKS (Pty) Ltd. 2011. Prince Albert Local Municipality: Comprehensive Infrastructure Plan - Bulk Water and Sanitation. 87-91 p.

6.4.4.1.2 Prince Albert Road

Bulk Supply Infrastructure

The Prince Albert Road water is supplied by one borehole, currently owned by Transnet.

Water Treatment Works

No water monitoring or treatment is in place.

Service Storage

The raw water provided by the boreholes goes directly to an elevated steel tank from where it is distributed to the consumers.

Implications/Proposals for Prince Albert Local Municipality: (Source: Comprehensive Infrastructure Plan 2011)

- If is proposed that the recommendations listed in the Comprehensive Infrastructure Plan 2011 be applied.
- Future development in Prince Albert:
  - Water sources are adequate in the short and long term.
  - The WTW is not adequate for the short or long term.
  - The water storage is not adequate for the short or long term. (Note: The Prince Albert Local Municipality is currently busy with the construction of a 1.5Ml reservoir.)
- Future development in Leeu Gamka:
  - Water sources are adequate in the short and long term.
  - The WTW is not adequate for the short or long term.
  - The water storage is adequate for the short and long term.
- Future development in Klaarstroom:
  - Water sources are adequate in the short and long term.
  - The WTW is not adequate for the short or long term.
  - The water storage is adequate for the short and long term.

WATER INFRASTRUCTURE - KLAARSTROOM



LEGEND

- Water treatment plant
- Valve chamber
- Water borehole
- Water reservoir

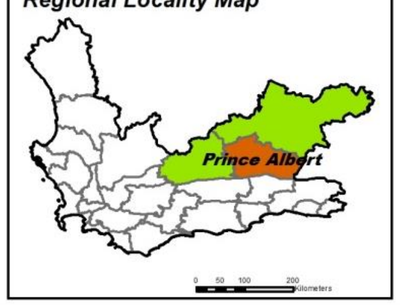
- 50mm Water Main
- 75mm Water Main
- 100mm Water Main
- 150mm Water Main
- Water pipe (other)

Roads

- Major
- Main
- Secondary

- Erven
- Farm Portion

Regional Locality Map



Prince Albert
Local Municipality

Data Sources:
Demarcation Board, NGI, PGWC, MapIT & BGIS (SANBI)

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6.4.4.2 Access to Sanitation Services

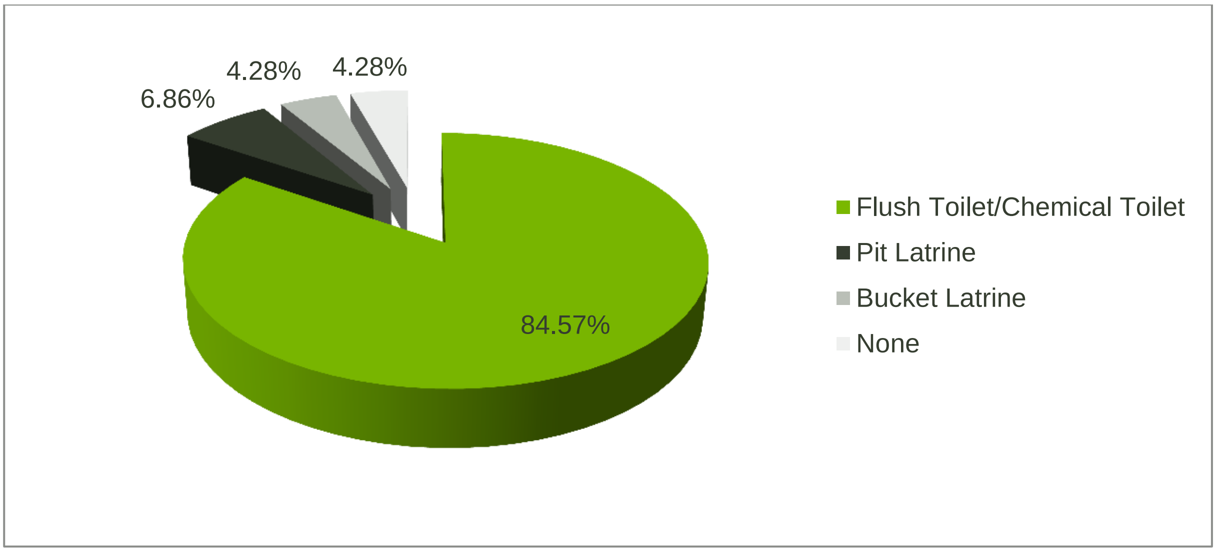
Sewage and sanitation are basic needs of communities which can pose serious health and hygiene risks for communities and the environment at large, if not properly managed and monitored.

According to the White Paper on Basic Household Sanitation, 2001, basic sanitation is defined as: "The minimum acceptable basic level of sanitation is:

- Appropriate health and hygiene awareness and behaviour
- A System for disposing of human excreta, household waste water ad refuse, which is acceptable and affordable to the users, safe, hygienic and easily accessible and which does not have an unacceptable impact on the environmental and
- A toilet facility for each household"

Only 15% of the households in the area still have sanitation services below a basic level, see **Figure 55** below).

Figure 55 | Access to sanitation services and backlogs 2011 [124]



[124] STATISTICS SOUTH AFRICA. 2012. Census 2011 Municipal report Western Cape.p.85

6.4.4.2.1 Prince Albert

Waste Water Treatment Works[125]

The Prince Albert WWTW does not hold any Permit or License. The design capacity of the WWTW is estimated to be 1 000 kl/day hydraulic and 690 kg biochemical oxygen demand per day (BOD/day) biological load.

The final effluent is used for irrigation at the adjacent nursery, or it is discharged uncontrolled to the Wolwekraal Nature Reserve. This effluent stream will soon reach the course of the Dorpsriver (see **Figure 56**), which will reduce the water quality of the river and the Gamka river into which it discharges.

The WWTW has three anaerobic ponds, the first two functions as the primary and the third as the secondary pond, followed by six oxidation ponds in series, see **Map 41** below.

Figure 56 | Uncontrolled effluent discharge (Google Earth)



Table 33 below summarizes the level of service of the Prince Albert WWTW:

Table 33 | Prince Albert WWTW: Level of Service

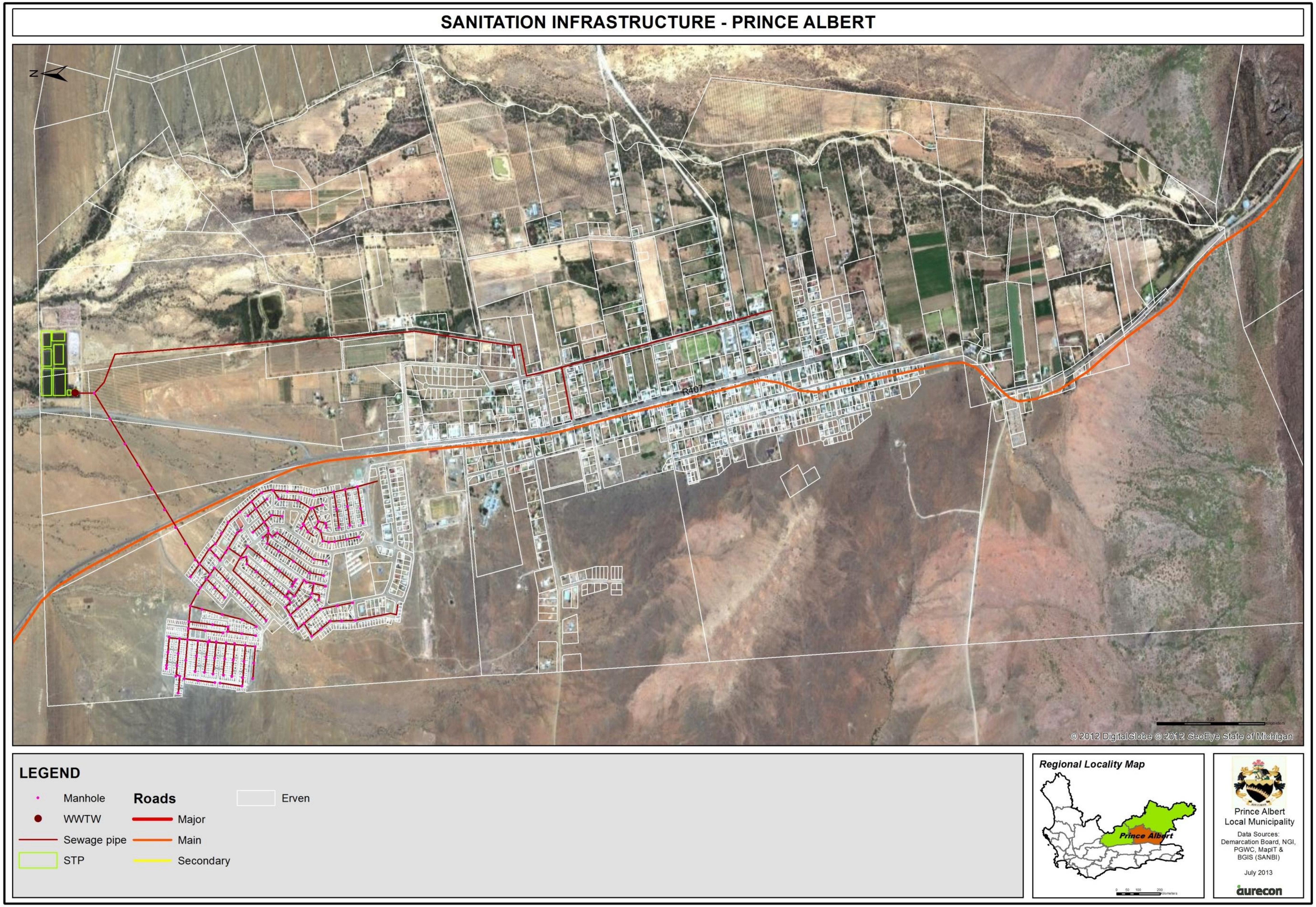
Treatment works	Capacity	Staffing levels	Monitoring	Compliance to standard
Prince Albert WWTW	1 000 kl/day	Poor	Poor	Acceptable

The Bulk Infrastructure Master Plan 2011 recommended the following:

- That Prince Albert Local Municipality renews the Prince Albert WWTW license.
- The current capacity of the WWTW is marginally too low and it will not be able to handle the future expected sewage flows.
- The irrigation practice is also insufficiently managed and needs to be addressed as soon as possible to avoid the current uncontrolled discharge.

[125] BKS (Pty) Ltd. 2011. Prince Albert Local Municipality: Comprehensive Infrastructure Plan - Bulk Water and Sanitation. 87-91 p.

SANITATION INFRASTRUCTURE - PRINCE ALBERT



Map 41 | Sanitation – Prince Albert

6.4.4.2.2 Leeu Gamka

Waste Water Treatment Works[126]

The Leeu Gamka WWTW does not hold any permit or license. The WWTW has a design capacity of 300 kl/day, which would be sufficient to meet future requirement. Final effluent is used for irrigation or overflows into the adjacent field.

Sewage from Leeu Gamka drain by gravity to the central sewer pump station. The wastewater is screened at the pump station before being pumped to the WWTW. The night fall (buckets) are deposited in a manhole upstream of the central pumping station. The buckets are washed and stored at the central pumping station. The WWTW currently consists of an inlet works with two hand raked screens, followed by eight oxidation ponds in series, see **Map 42** below.

Table 34 below summarizes the level of service of the Leeu Gamka WWTW:

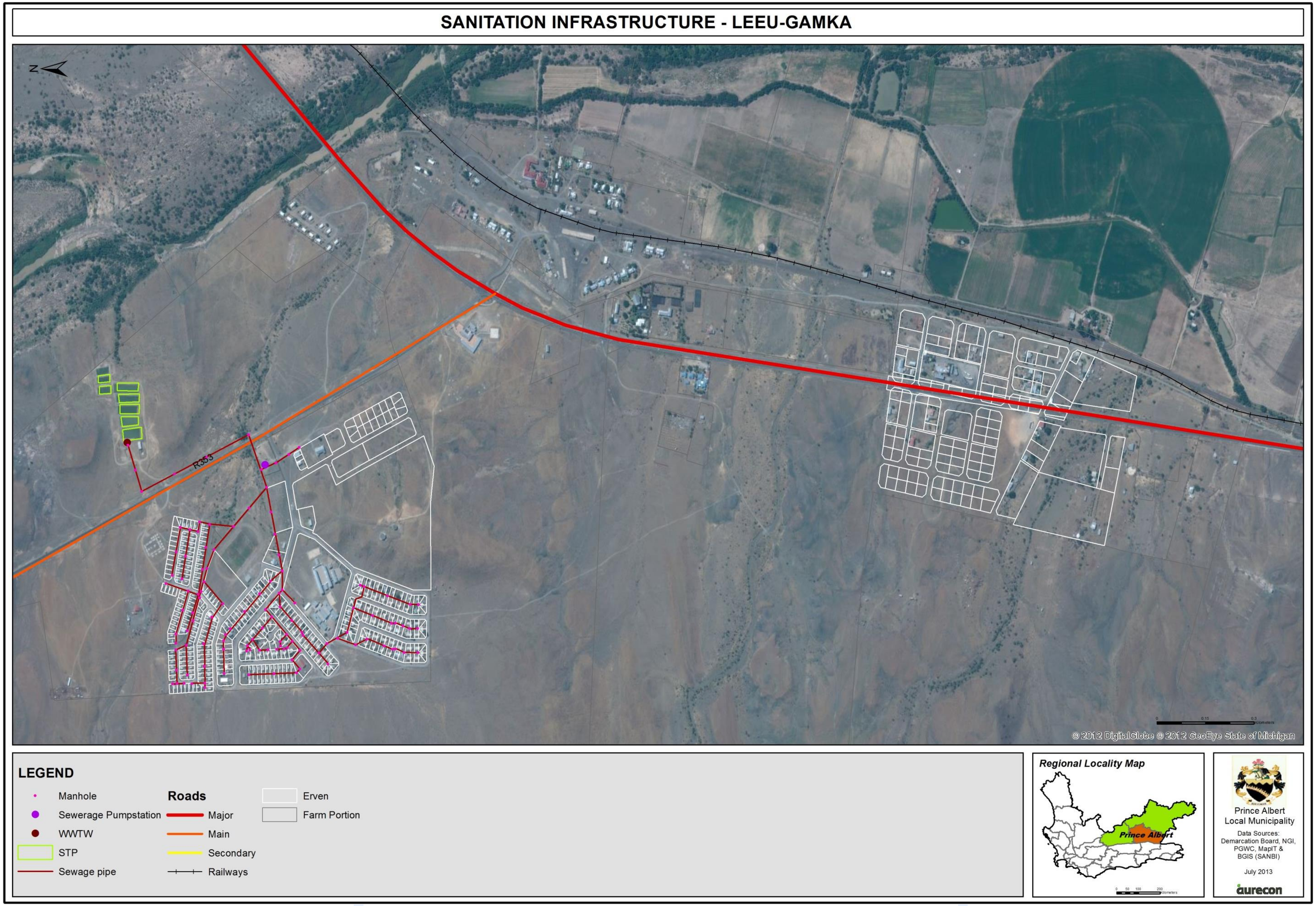
Table 34 | Leeu Gamka WWTW: Level of Service

Treatment works	Capacity	Staffing levels	Monitoring	Compliance to standard
Leeu Gamka WWTW	300 kl/day	Poor	Poor	Poor

The Bulk Infrastructure Master Plan 2011 recommended the following:

- That the license renewal be finalised for the Leeu-Gamka WWTW.
- The wash water from the bucket washing process discharges into a culvert that leads directly into the nearby water course. This practice of discharging untreated water to a natural watercourse is unacceptable and a diversion to the manhole should be constructed.

[126] **BKS (Pty) Ltd. 2011. Prince Albert Local Municipality: Comprehensive Infrastructure Plan - Bulk Water and Sanitation. 91-97 p.**



Map 42 | Sanitation – Leeu Gamka

6.4.4.2.3 Klaarstroom

Waste Water Treatment Works[127]

The Klaarstroom WWTW does not hold any permit or license. The works has a design capacity of 50 kl/day. It consists of an anaerobic pond and an oxidation pond with the final effluent overflowing into the adjacent field, see **Map 43** below.

Table 35 below summarizes the level of service of the Klaarstroom WWTW.

Table 35 | Klaarstroom WWTW: Level of Service

Treatment works	Capacity	Staffing levels	Monitoring	Compliance to standard
Klaarstroom WWTW	50 kl/day	Poor	Poor	Poor

The Bulk Infrastructure Master Plan 2011 recommended the following:

- A license application has to be finalised for the Klaarstroom WWTW as a matter of urgency.
- The amount of flow to and from the WWTW needs to be determined by installing flow meters to ensure that flows are within the license requirement.
- The oxidation pond cannot be operated effectively due to "short circuit" flow associated with the inlet and outlet configuration of the pond.

6.4.4.2.4 Prince Albert Road

The Prince Albert Road sanitation system does not hold any permit or license. The settlement still uses the bucket sanitation system. All the buckets are emptied at a central septic tank with soak-away. The current capacity and volume of the central septic tank is unknown. Both the septic tank and soak away are in an unacceptable condition.

The Bulk Infrastructure Master Plan 2011 recommended that:

- A licenced WWTW should be in place.

Implications/Proposals for Prince Albert Local Municipality: (Source: Comprehensive Infrastructure Plan 2011)

- If is proposed that the recommendations listed in the Comprehensive Infrastructure Plan 2011 be applied.
- The Prince Albert WWTW is **not** adequate for future development in the short or long term. It is proposed that the Prince Albert Local Municipality take action to manage the uncontrolled discharge of effluent.
- The Leeu Gamka WWTW is adequate for future development in the short and long term.
- The Klaarstroom WWTW is adequate for future development in the short and long term.
- A licenced WWTW should be in place for future development in Prince Albert Road.

[127] BKS (Pty) Ltd. 2011. Prince Albert Local Municipality: Comprehensive Infrastructure Plan - Bulk Water and Sanitation. 98-102 p.

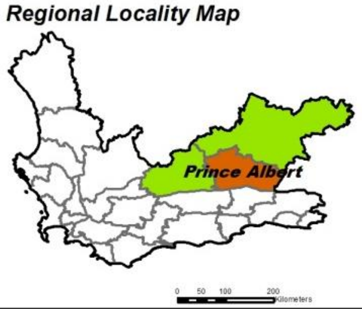
SANITATION INFRASTRUCTURE - KLAARSTROOM



LEGEND

	Sanitation Flow	**Roads**			Erven
	WWTW		Major		Farm Portion
	Sewage pipe		Main		
	Sanitation pipeline		Secondary		

Regional Locality Map



Prince Albert Local Municipality

Data Sources: Demarcation Board, NGI, PGWC, MapIT & BGIS (SANBI)

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6.4.4.3 Electricity Services

High and medium voltage power lines run along the towns of Leeu-Gamka and Klaarstroom. Only medium voltage power lines reach the town of Prince Albert, see **Map 44** below.

According to the **Figure 57 to 59** below, the majority of people in the Local Municipality have access to electricity (86.42%) for lighting, electricity (62.66%) for heating and electricity (76.10%) for cooking. Electricity provision is clearly linked to bulk services, which is provided by Eskom. This explains the high percentage of the population with adequate access to electricity services. In rural areas, the farms are also provided with Eskom electricity; however there is still a backlog of 27.4%.[128]

Figure 57 | Energy or fuel for lighting[129]

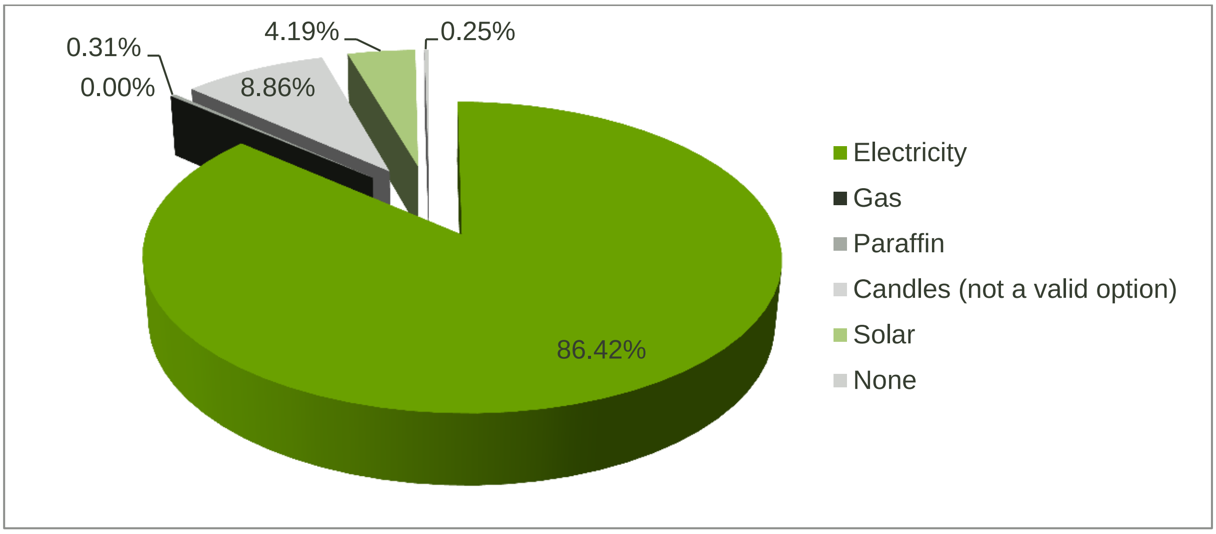
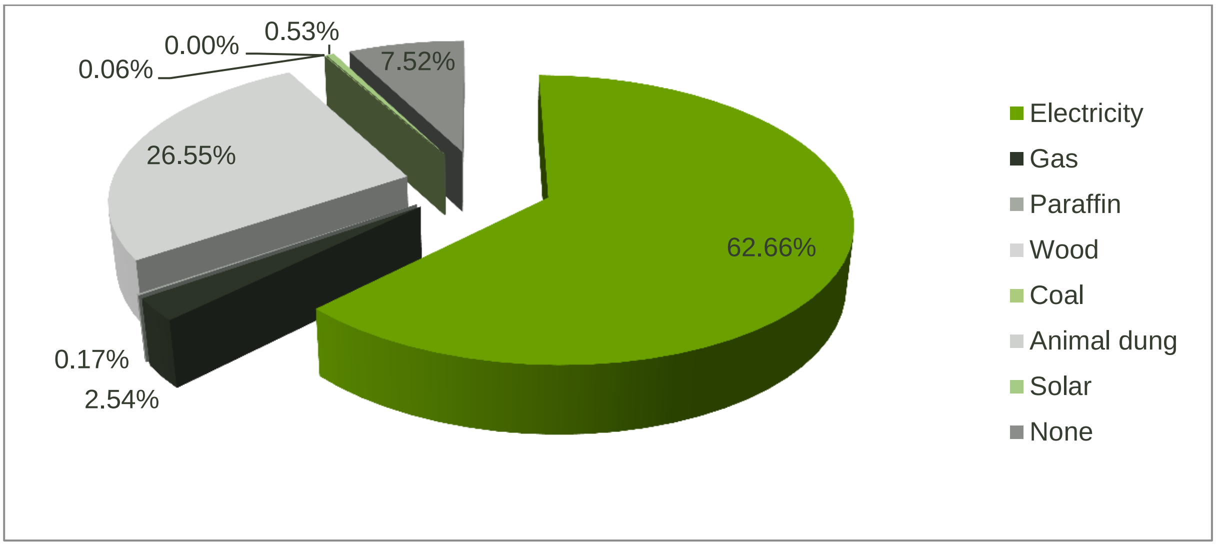
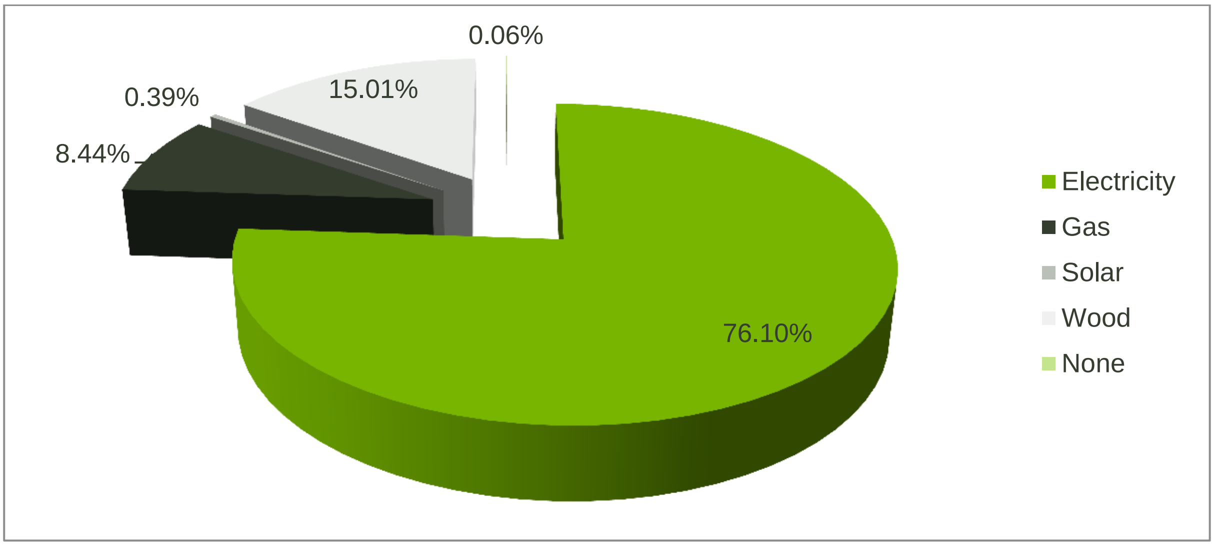


Figure 58 | Energy for heating[130]



[128] PRINCE ALBERT LOCAL MUNICIPALITY. 2012. Prince Albert Local Municipality 3rd Generation IDP, 2012-2017. p. 52
[129] STATISTICS SOUTH AFRICA: Census 2011
[130] STATISTICS SOUTH AFRICA: Census 2011

Figure 59 | Energy for cooking[131]



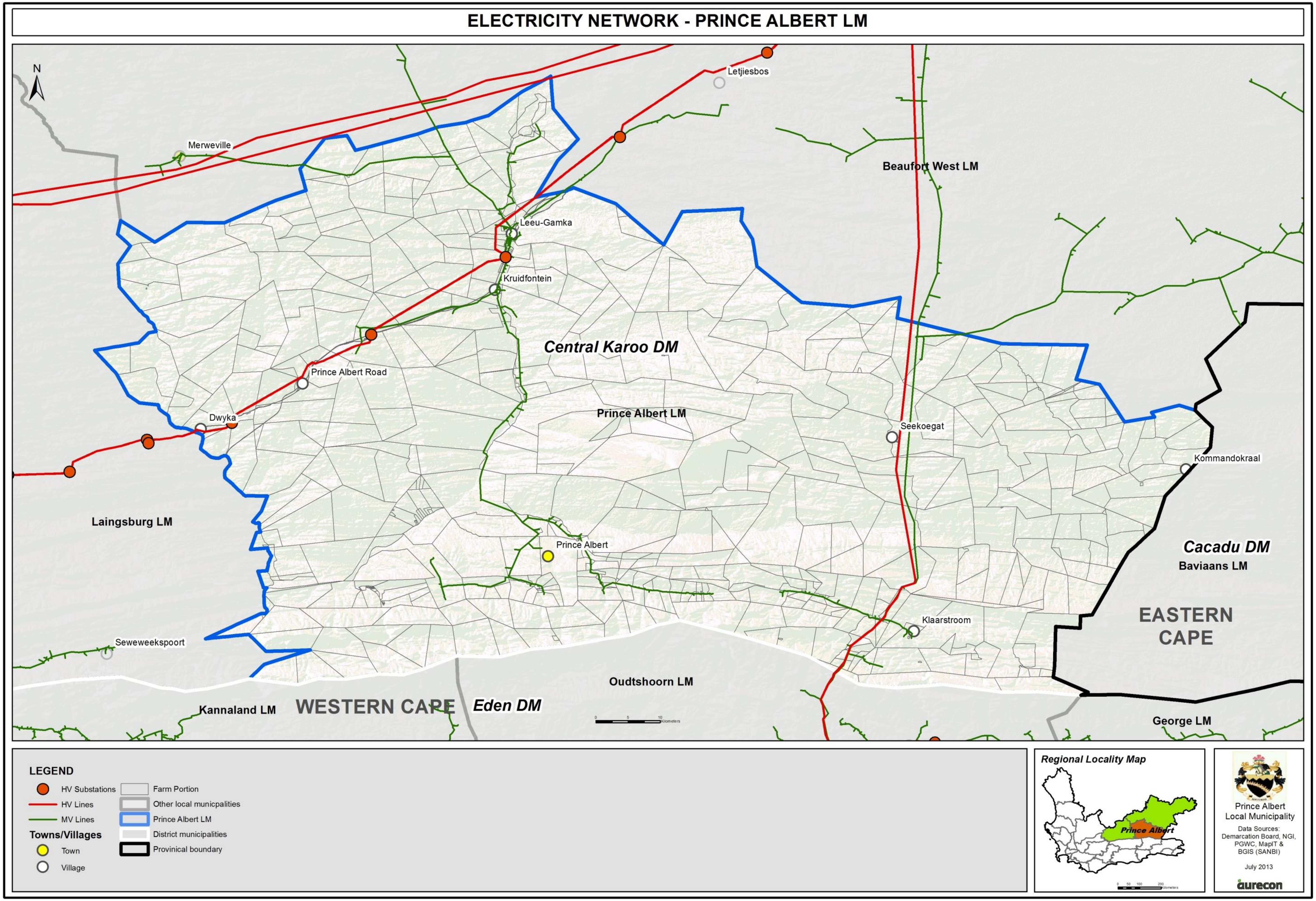
The need for an Electricity Master Plan exists to ensure an Asset Management System is in place for the entire electricity infrastructure. Maintenance of existing infrastructure, especially substations is lacking and needs serious intervention to ensure continuous and uninterrupted service delivery in the future. [132]

The town planning process is currently underway for the development of a Solar Power Plant on a portion (20ha) of Portion 40 of the Farm Kruitfontein no.33 (close proximity of Leeu Gamka). A Solar Power Plant means any solar energy generation equipment, or grouping thereof, that captures and converts solar radiation into energy for commercial gain.

Implications for Prince Albert Local Municipality:

- Access to electricity services should not have an impact on the spatial development of the municipal area.
- The use of renewable energy sources should be explored and encouraged.

[131] STATISTICS SOUTH AFRICA: Census 2011
[132] PRINCE ALBERT LOCAL MUNICIPALITY. 2012. Prince Albert Local Municipality 3rd Generation IDP, 2012-2017. p. 52



Map 44 | Bulk Electricity Network

6.4.4.4 Access to refuse services

Refuse removal and management are of the most critical issues in municipal service delivery and can have seriously adverse implications for the environment if refuse is not collected and disposed of properly. It entails the collection of household and industrial refuse and the management thereof.

The Prince Albert Local Municipality is responsible for the disposal of general waste and has four waste disposal sites, namely at Prince Albert, Prince Albert Road, Leeu Gamka and Klaarstroom.

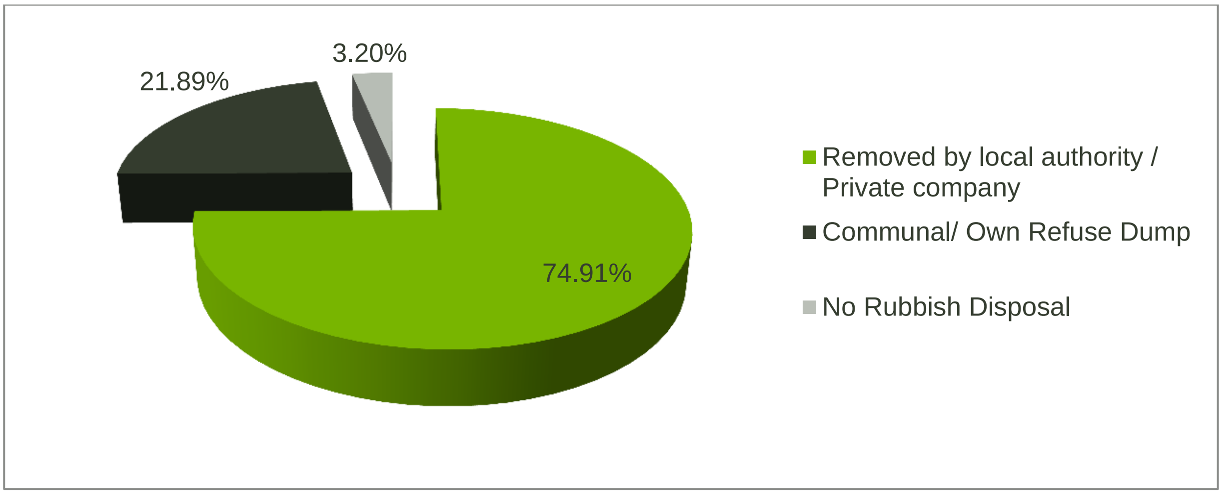
Medical waste is an area of great concern in Prince Albert Local Municipality. The illegal dumping of medical waste and the co-disposal of medical waste with general household waste on unsuitable or unpermitted landfill sites is on the increase. Furthermore, the general methods currently employed to destroy and dispose of medical waste are in many instances simply unacceptable.[133]

From Table 36 and Figure 60 below it is clear that the majority of the households refuse are removed by Prince Albert Local Municipality. The removal of refuse by Prince Albert Local Municipality increased from 35% in 1996 to 75% in 2011. An assumption can be made that the "Communal/Own Refuse Dump" figures represents the farming community which is not serviced by Prince Albert Local Municipality. This however promotes illegal dumping of waste.

Table 36 | Access to Refuse Removal[134]

Refuse Removal	1996	2001	2011
Removed by local authority / Private company	64.98%	72.66%	74.91%
Communal/ Own Refuse Dump	34.73%	27.06%	21.89%
No Rubbish Disposal	0.29%	0.27%	3.20%

Figure 60 | Access to Refuse Removal (2011) - Prince Albert Local Municipality



[133] PRINCE ALBERT LOCAL MUNICIPALITY. 2012. Prince Albert Local Municipality 3rd Generation IDP, 2012-2017. p. 54
[134] STATISTICS SOUTH AFRICA. 2012. Census 2011 Municipal report Western Cape.p.65

6.4.4.4.1 Prince Albert[135]

Prince Albert has a Waste Disposal Site with a permit and five mini-transfer stations located in Prince Albert (North End), each station is supplied with black bags on a weekly basis by the municipality. This waste disposal site will reach its maximum by 2015.

Prince Albert has two waste removal vehicles: One tractor-trailer (open trailer), which is responsible for the removal of garden refuse and a tractor-trailer (closed trailer) removing domestic waste; see **Figure 61 and 62** below. Each of the waste collection tractor-trailers are operated by a three-man crew.



Figure 61 | Tractor-Trailer (closed trailer)



Figure 62 | Tractor-Trailer (open trailer)

Waste is burned on a daily basis and household, garden waste and builder's rubble are co-disposed in a haphazard manner. According to local citizens the haphazard burning leads to smoldering of plastics and other toxic materials, the fumes of which drift in the air for days. The local citizens also indicated that the solid waste is spilling into a tributary of the Dorps River.

The following issues were identified in the solid waste management cost estimate report:

- No compaction and covering of waste on a daily basis;
- No stormwater and waste separation;
- Lack of management at the five mini-transfer stations
- Inadequate fencing of waste disposal area; and
- Illegal pickers.

Currently the waste disposal sites are inadequately managed and the municipality needs to reprioritise solid waste management and redress the situation. It should be noted that the dump in Prince Albert is adjacent to a tributary of the Dorpsriver and there is no lining or seal to prevent contamination by seepage from the dump.

[135] AURECON. 2011. Cost Estimate for Solid Waste Management for Prince Albert Local Municipality. 7 p.

Recycling

In terms of recycling Prince Albert has an on-site recycling area adjacent to the waste disposal area. Recyclables are collected on a weekly basis, separately to household waste, and sorted at the recycling area at Prince Albert. The "Retain, Reuse and Recycle" (RRR) company located in Oudtshoorn removes the recyclables on a weekly basis.

Furthermore a buyback project existed in Prince Albert which allowed residents to sell their recyclables. Unfortunately, this project is currently on hold due to the lack of available funds. The solid waste management cost estimate report recommends that Prince Albert Local Municipality subsidise the project.

Two Prince Albert residents bought a chipper and are very interested in entering into contract with the municipality to undertake the processing of garden waste in Prince Albert on behalf of the municipality. The solid waste management cost estimate recommends the municipality to investigate this option in earnest.

Further to the above a proposal to manage garden waste was submitted to the municipality in 2008, it is proposed that this programme be considered by the municipality.

6.4.4.4.2 Leeu Gamka[136]

Prince Albert Local Municipality is in the process to apply for a permit for the Leeu Gamka Waste Disposal Site. The solid waste management cost estimate report indicated that this waste disposal site will reach its maximum by 2013.

Waste is removed at weekly intervals with a tractor-trailer. No separation of waste at source is occurring and household waste, builder's rubble and garden waste is being co-disposed. The following issues were identified in the solid waste management cost estimate report:waste

- No separation of the different waste types;
- No compaction and covering of waste on a daily basis which results in windblown litter;
- Illegal burning of waste;
- Inadequate fencing;
- No entrance gate with access control;
- Illegal pickers;
- Broken glass on site, making is unsafe for illegal scavengers; and
- Waste collection vehicles needs to be replaced

Recycling

There are currently no formalized recycling initiatives in place at the Leeu Gamka landfill site. The solid waste management cost estimate report recommended the following:

- A recycling awareness campaign to educate the residents of Leeu Gamka.
- A buyback system to promote recycling.

[136] **AURECON. 2011. Cost Estimate for Solid Waste Management for Prince Albert Local Municipality. 15 p.**

6.4.4.4.3 Klaarstroom[137]

Prince Albert Local Municipality is in the process to apply for a permit for the Klaarstroom Waste Disposal Site. This waste disposal site will reach its maximum by 2025.

Waste is collected on a weekly basis with a tractor and open trailer collecting all of the general waste types produced in Klaarstroom. The following issues were identified in the solid waste management cost estimate report:

- No separation of the different waste types;
- No compaction and covering of waste on a daily basis which results in windblown litter; and
- Broken fencing;
- Waste collection vehicles needs to be replaced
- Possible water contamination

Recycling

There are no formal recycling programs in place in Klaarstroom at present. However there does appear to be support for such initiative.

6.4.4.4.4 Prince Albert Road[138]

Transnet currently operates the waste disposal site at Prince Albert Road. The following issues were identified in the solid waste management cost estimate report:

- Some essential infrastructure needs to be constructed in order to meet the minimum requirements of a waste disposal site permit; and
- No buffer zone between landfill site and adjoining RDP development creating a health and safety risk.

Implications for Prince Albert Local Municipality:

- Prince Albert Local Municipality should address the waste disposal site issues identified.
- Prince Albert Local Municipality should promote recycling initiatives.
- A new landfill site should be identified in Prince Albert and Leeu Gamka or the extension of the current landfill sites should be explored.

6.4.4.5 Telecommunications services

Telecommunication services are something that is becoming more important in modern day life. The ability to communicate and interact with people is essential to a modern lifestyle. The fact that the Local Municipality is rural in nature means that these services are sometimes limited.

This section will investigate the major cell phone networks' coverage in the Local Municipality. The networks that were assessed are:

- MTN
- Vodacom
- 8ta, and
- Cell C

[137] AURECON. 2011. Cost Estimate for Solid Waste Management for Prince Albert Local Municipality. 20 p.
[138] AURECON. 2011. Cost Estimate for Solid Waste Management for Prince Albert Local Municipality. 17 p.

Figure 63 below shows the network coverage of the service provider 8ta in the municipal area. From the figure it can be seen that 8ta serves the majority of the Prince Albert Local Municipality, but that the signal strength is limited to a basic edge or GPRS signal. They do not provide 3G coverage in the Local Municipality.

The coverage provided by Cell C is shown in **Figure 64** below. There is small areas showing no coverage and they also do not provide any 3G signal in the Local Municipality

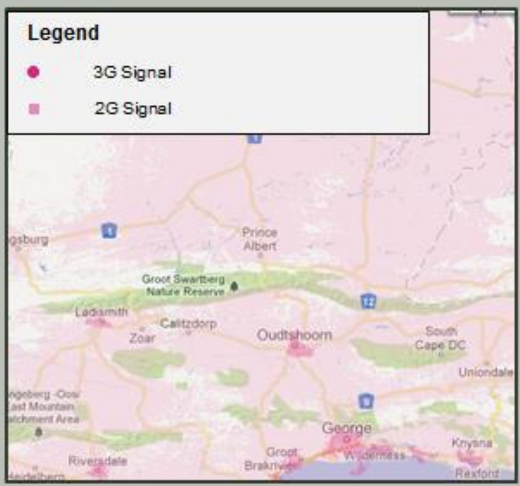


Figure 63 | 8ta coverage

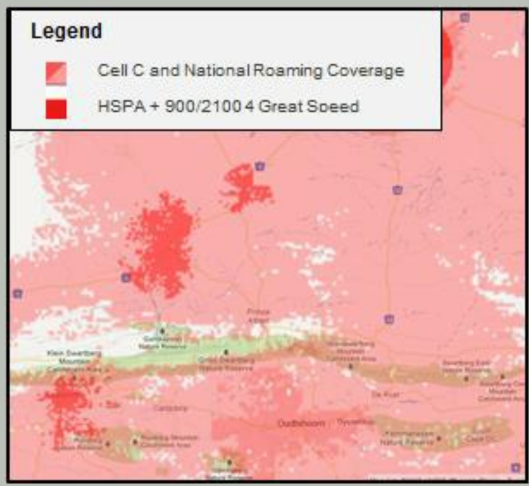


Figure 64 | Cell C coverage

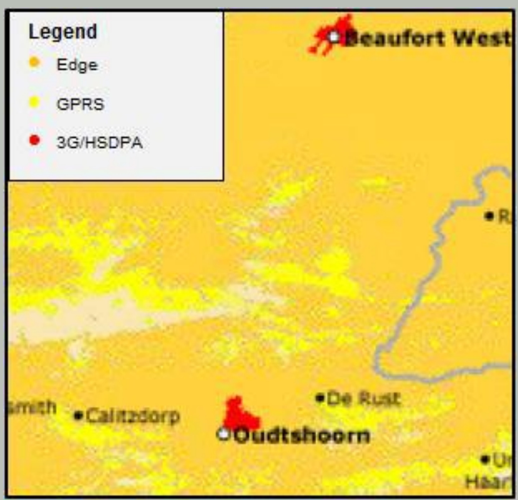


Figure 65 | MTN coverage

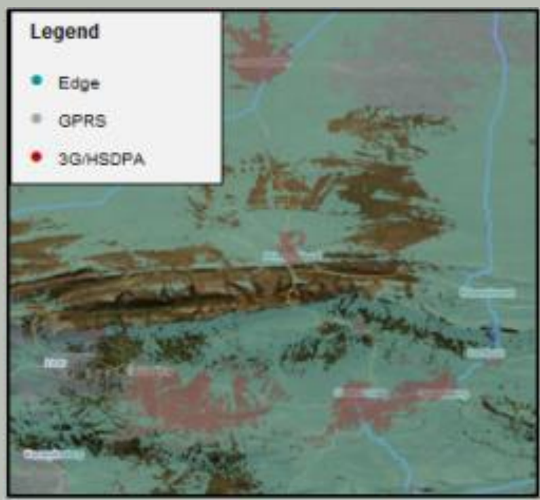


Figure 66 | Cell C coverage

MTN follows much the same pattern as the two previous Cell Phone Networks, see **Figure 65** above. Vodacom is the only network that has 3G signal in the municipal area, but it is restricted to Prince Albert and Leeu Gamka, see **Figure 66** above. Their total coverage is less than the other Service Providers with large 'dead zones'.

Implications for Prince Albert Local Municipality:

- The overall access to telecommunication services is poor which hampers the rapid response of businessmen.

6.4.5 Housing

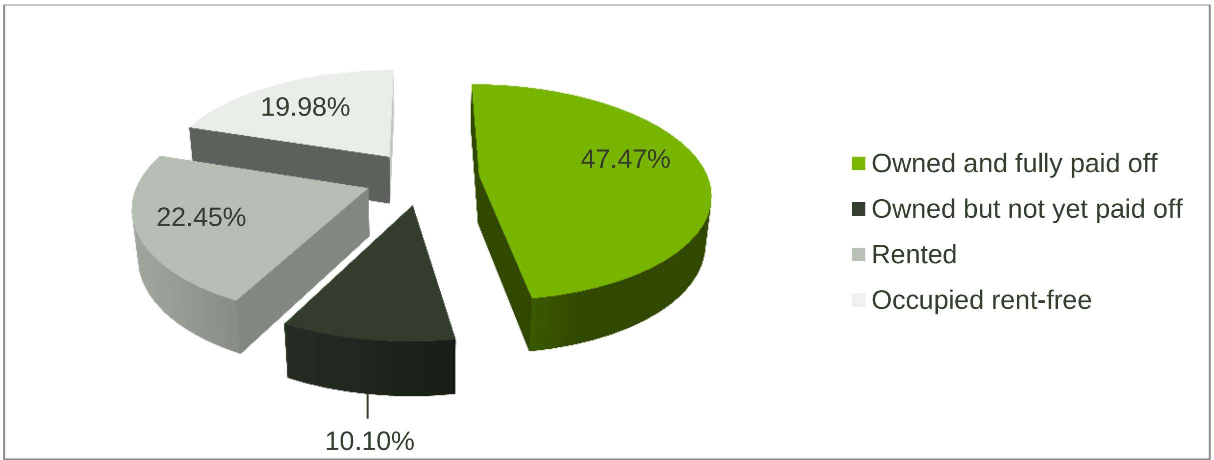
The Housing Act of 1997 (Act 107 of 1997) defines "housing development" as:

- 1(vi) "… the establishment and maintenance of habitable, stable and sustainable public and private residential environments to ensure viable households and communities in areas allowing convenient access to economic opportunities, and to health, educational and social amenities in which all citizens and permanent residents of the Republic will, on a progressive basis, have access to:
- (a) permanent residential structures with secure tenure, ensuring internal and external privacy and providing adequate protection against the elements; and
- (b) potable water, adequate sanitary facilities and domestic energy supply." [139]

This definition links all the key elements in the urban environment.

6.4.5.1 Housing Tenure

Figure 67 | Housing Tenure Status (2011)[140]



[139] SOUTH AFRICA. 1997. The Housing Act 107 of 1999. Pretoria: Government gazette.
[140] STATISTICS SOUTH AFRICA. 2012. Census 2011 Municipal report Western Cape.p.81

Table 37 | Housing Tenure – Prince Albert Local Municipality

	2001	2011
Owned and fully paid off	55%	47%
Owned but not yet paid off	4%	10%
Rented	20%	22%
Occupied rent-free	20%	20%

A fairly large proportion (57%) of the municipal population owns a house, of which 10% still owe on an outstanding bond on their houses, see **Figure 67 and Table 37** above. This is quite an accomplishment and may indicate how long people live in one place or reflect the number of retired persons that stays in the area and paid of their properties. A further 22% rent houses and 20% occupy a dwelling rent free.

Table 38 shows the IDP housing waiting list of Prince Albert Local Municipality.

Table 38 | Housing Demand – Prince Albert Local Municipality (Source: IDP)

Prince Albert	Leeu Gamka	Klaarstroom	Total
842	502	144-60*	**1428**

** 60 subsidy housing units were constructed i n Klaarstroom as part of the Integrated Residential Development Programme*

Table 39 below indicates the business plan targets of the Department of Human Settlement for Prince Albert Local Municipality and the **Maps 45 to 47** below illustrates the locality thereof.

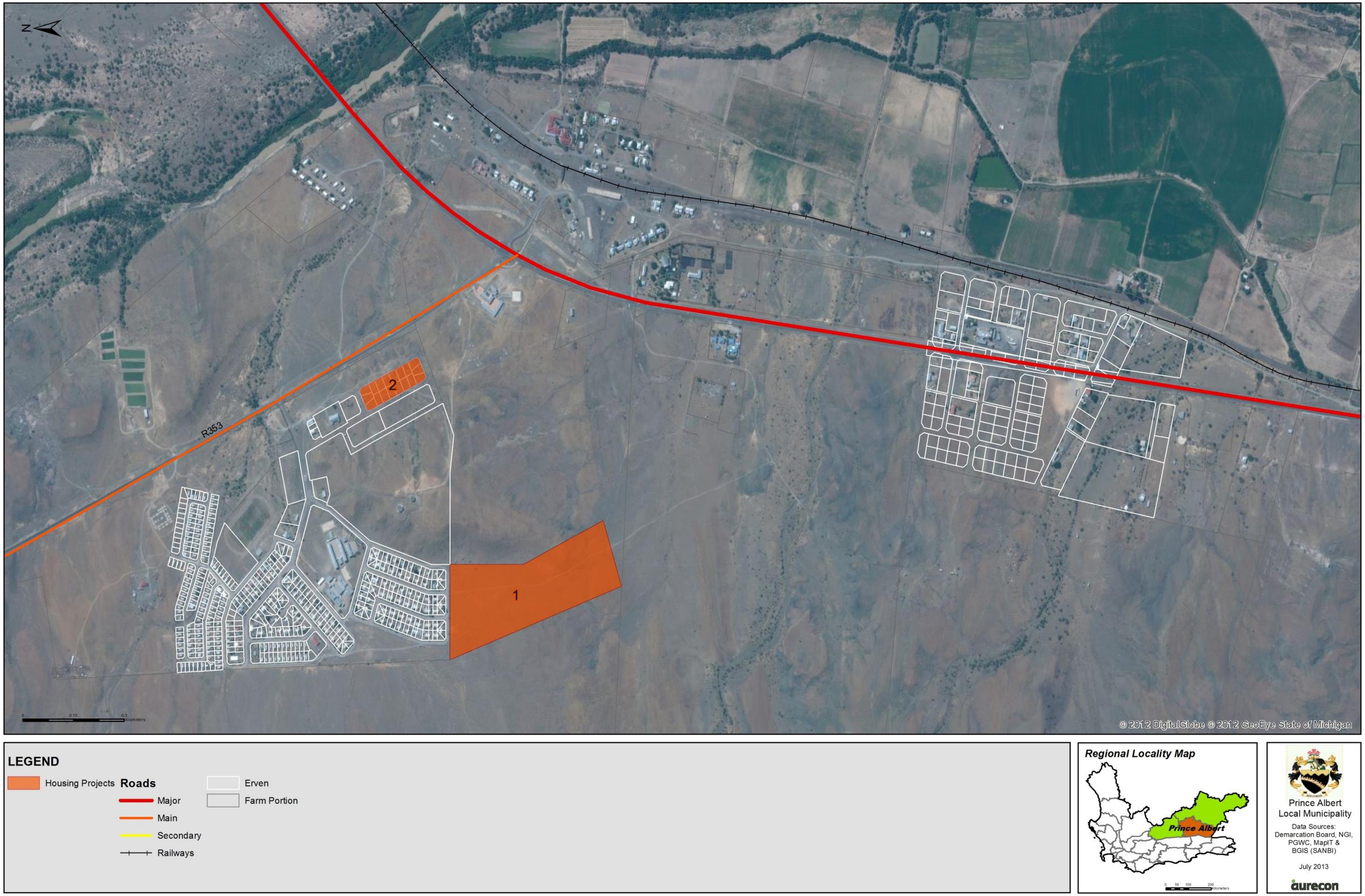
Table 39 | Department of Human Settlements - Business Plan Targets

Project	Units	Programme	Proposed Implementation	Locality
Leeu Gamka (Subsidy)	251	IRDP	2013/14 financial year	
Leeu Gamka (GAP)	69	IRDP/Finance Linked Individual Subsidy Programme (FLISP)	2013/14 financial year	Area 1 and 2 on the "Locality of Future Housing Projects – Leeu Gamka" map below.
Prince Albert (Subsidy)	300	IRDP	2015/16 financial year	Area 3 on the "Locality of Future Housing Projects – Prince Albert" map below.
Transnet Housing Leeu-Gamka & Prince Albert Road (Rental Units)	69	Unknown	Unknown	Area 5 on the "Locality of Future Housing Projects – Prince Albert Road" map below.

Implications for Prince Albert Local Municipality:

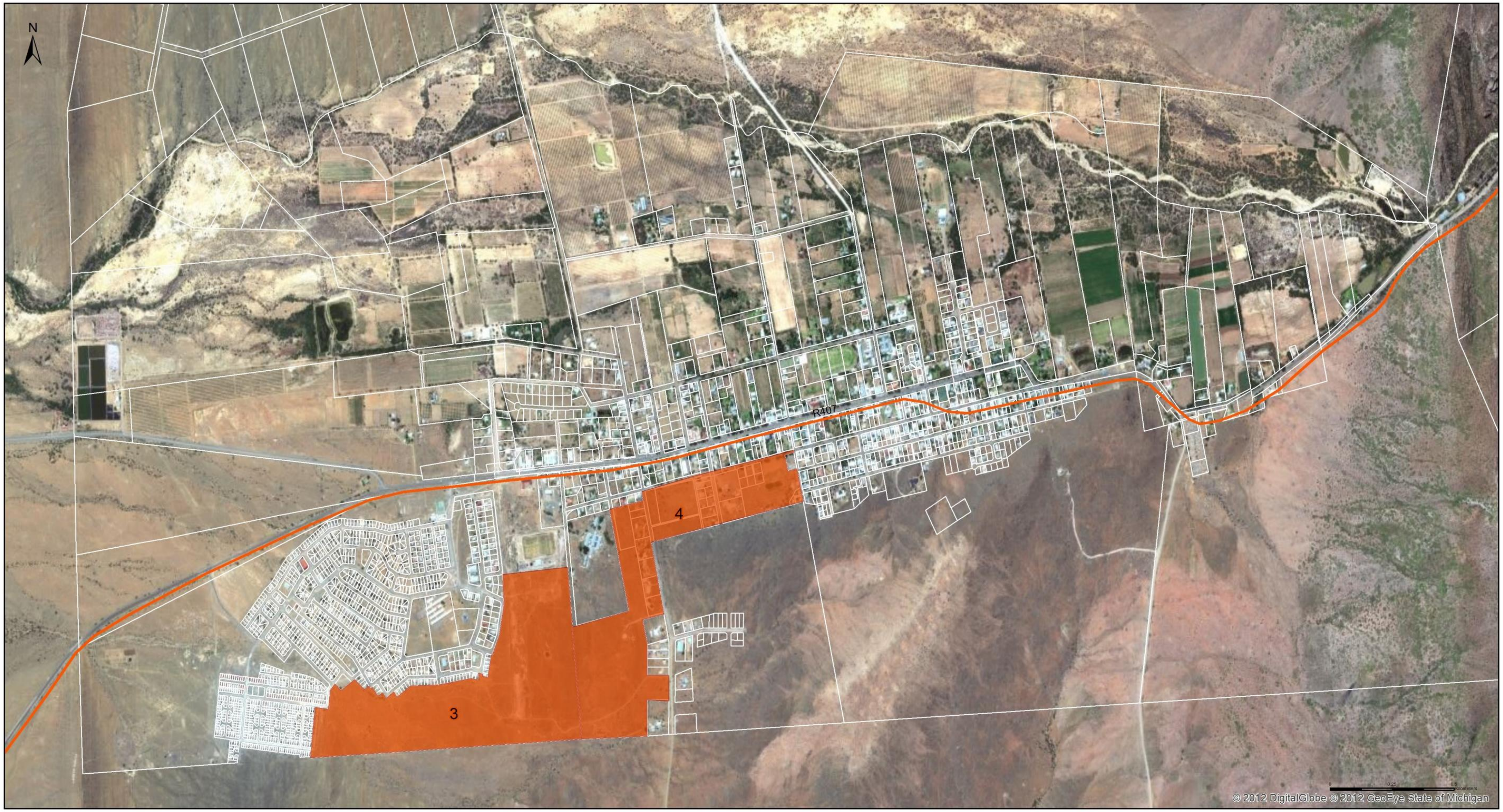
- It is proposed that future low cost housing projects in the town and settlements of Prince Albert Local Municipality be strategically located as a means to bridge the spatially fragmented town structures that exist.
- It is proposed that future housing developments in the town and settlements of Prince Albert Local Municipality be strategically located as a means to bridge the spatially fragmented town structures that exist.

HOUSING PROJECTS - LEEU-GAMKA



Map 45 | Locality of Future Housing Projects – Leeu Gamka

HOUSING PROJECTS - PRINCE ALBERT



LEGEND

- Housing Projects
- **Roads**
  - Major
  - Main
  - Secondary
- Erven

Regional Locality Map



Prince Albert
Local Municipality

Data Sources:
Demarcation Board, NGI,
PGWC, MapIT &
BGIS (SANBI)

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Map 46 | Locality of Future Housing Projects – Prince Albert

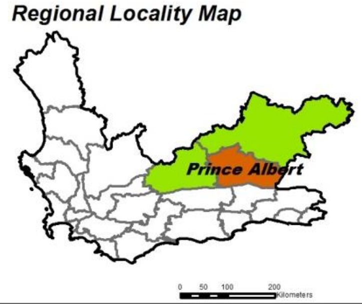
HOUSING PROJECTS - PRINCE ALBERT ROAD



LEGEND

Housing Projects
Roads
Major
Main
Secondary
Railways
Farm Portion

Regional Locality Map



Prince Albert
Local Municipality

Data Sources:
Demarcation Board, NGI,
PGWC, MapIT &
BGIS (SANBI)

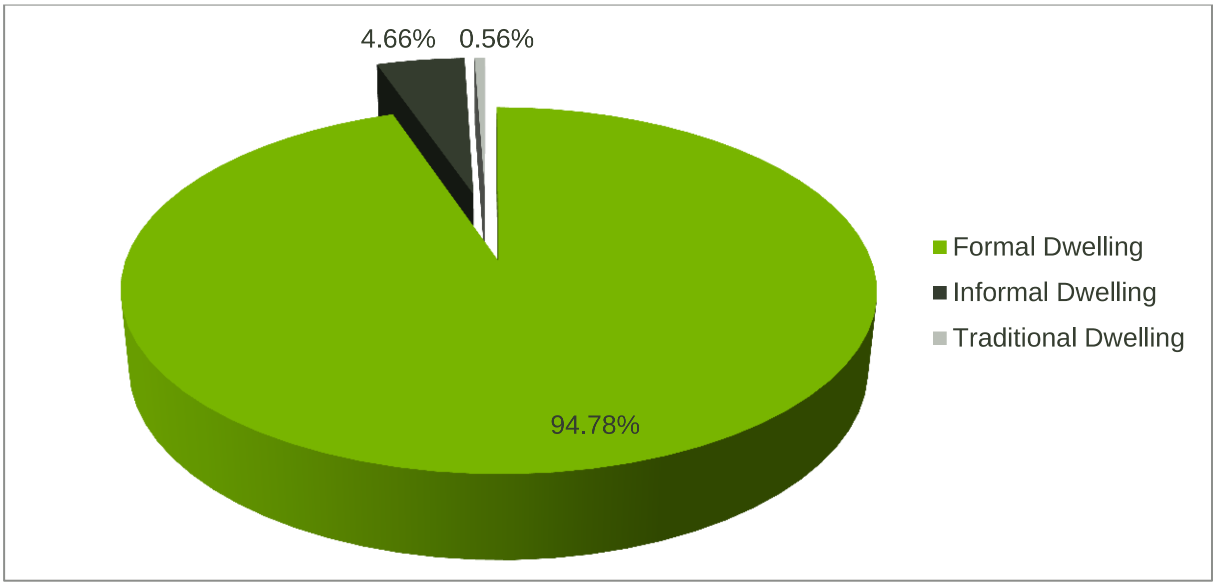
July 2013

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Map 47 | Locality of Future Housing Projects – Prince Albert Raod

6.4.5.2 Dwelling types

Figure 68 | Dwelling Type (2011)[141]



Housing types vary according to settlement type. Housing type also links to land ownership issues. Security of tenure contributes to more permanent and conventional housing types while a lack of security tend to bring about traditional houses in the rural areas and informal dwellings in the urban areas.

The majority of people in the Local Municipality (94.78%) live in formal housing. There are very few informal dwellings in the Local Municipality.

[141] STATISTICS SOUTH AFRICA. 2012. Census 2011 Municipal report Western Cape.81 p.

6.4.6 Unfunded IDP Projects

Table 40 shows the unfunded projects as listed in the Prince Albert Local Municipality IDP:

Table 40 | Unfunded IDP Projects

Project Name	Project Description	Priority	Estimate Budget
Bulk Infrastructure			
Bulk sanitation	Prince Albert Road	Upgrade of WWTW	R 2 100 000
Water Provision	Prince Albert Road	Boreholes and Mains, including pump station	R 1 570 000
Water Provision	Prince Albert Road	Reservoir, including upgrade of WTW	R 980 000
Bulk sanitation	Prince Albert	Upgrade of WWTW, including intake and activated sludge	R 3 400 000
Water Provision	Prince Albert	Upgrade of WTW, including and larger soda Ash plant, Additional storage capacity and Filtering,	R 11 000 000
Water Provision	Leeu-Gamka	Upgrade mains and water supply lines, excluding reticulation	R 2 500 000
Bulk sanitation	Leeu-Gamka	Bulk sanitation connection to previous Spoornet areas	R 4 000 000
Water Provision	Leeu-Gamka	Bulk water connection, including mains and supply line to previous Spoornet area	R 4 000 000
Bulk sanitation	Prince Albert	Bulk Sanitation affluent re-use, including chlorination, reservoir pump station and pipeline for irrigation + upgrade of inflow to WWTW, and reticulation pump stations	R 8 000 000
Bulk Sanitation	Leeu-Gamka	Bulk Sanitation, WWTW, chlorination, septic tank, and pump station for irrigation of effluent	R 3 000 000
Stormwater Upgrade	Prince Albert & Leeu-Gamka	Storm water upgrade, including drainage and curbing, Adderley Street, North End and Bitterwater	R 5 000 000
Bulk Sanitation	Prince Albert	Internal bulk sanitation, including upgrading of septic tank system to waterborne systems	R 3 340 000
Water provision	Prince Albert	Storage dam	R 15 000 000
Water provision	Prince Albert	Boreholes and Mains	R 2 690 000

Project Name	Project Description	Priority	Estimate Budget
Street Lighting	Leeu-Gamka	Community Lighting	R 2 000 000
Public Transport	Prince Albert & Leeu-Gamka	Upgrade of taxi, bus route	R 5 000 000
Community Swimming pool	Prince Albert	Installation of a swimming pool	R 3 210 000
Public Transport	All Wards	Pavements and Terminus	R 1 200 000
Non-motorized transport projects	All Wards	Bicycle friendly roads	R 600 000
Electricity provision	All Wards	Kiosk and upgrade of Transformers	R 7 200 000
Electronic water metering	All Wards	Installation of electronic water meters	R 3 000 000
Electricity metering system	All Wards	Upgrade of electricity meters + Back office	R 2 000 000
Provision of Health Facilities	Klaarstroom	Construction of a Clinic/ Health Facility	R 3 000 000
Waste Management	All Wards	Integrated Waste Management Plan	R 200 000
Economic Development	All Wards	Integrated LED & Tourism Plan/ Strategy & Destination Marketing, SMME Tourism Dev.	R 2 500 000
Working for Water	All Wards	Alien clearing populars, prosopis, satansbos, cactuses	R 1 000 000
Human Settlements Development , 2121 units (backlog)	All Wards	Construction of new houses	R 212 100 000
Early Childhood Development	Leeu-Gamka	Facilitate the Construction of a ECD Centre that's safe & accessibly	R 2 000 000
Landfill Sites	All Wards	Rehabilitation & Registration of Landfill Sites	R 3 000 000
Electricity Master Plan	All Wards	Development of an Electricity Master Plan	R 200 000

Project Name	Project Description	Priority	Estimate Budget
SMME Development	All Wards	Development of SMME trading Hubs	R 5 000 000
Sector Plan`s Development	All Wards	Professional Fees for Socio-economic, Township Plans, Transport Plan, Housing Plan and Poverty Strategy	R 2 000 000
Neighbourhood & Urban Design	All Wards	Settlements Integration	R 5 000 000
Special Projects			
Swartberg Pass Project Phase 2	Prince Albert	This proposal serves as motivation for the Swartberg Pass Project, a community-based job creation initiative under the auspices of the Central Karoo's Strategic Framework for Economic Regeneration.	R 7,000,000
Pont over Gamka Dam	Prince Albert	The project aims to develop eco-cultural adventure tourism in the rural areas & link up with other tourism route 66	R 5,000,000
Gamkapoort development	Prince Albert	Develop a resting or eco park, with overnight facilities	R 4 500 000
2rd Phase Thusong Service Centre	Prince Albert	The project aims to bring government services closer to the people.	R 5,100,000
Municipal Office	Prince Albert, Leeu Gamka and Klaarstroom	Develop new offices, at the Thusong centre, in order to have all government services at one point. Equip and extend satellite offices	R 7 800 000
Community hall	Prince Albert	Establish a centre for community activity	R 3 700 000
Gap Housing & Low Cost Housing	PAM area; Leeu-Gamka; Prince Albert; Klaarstroom	The project aims to reduce the housing backlog and development of shacks.	R 26,900,000
Vehicle Testing Centre	Prince Albert	To bring services closer to the community & more accessible.	R 2,300,000
Alternative Energy (Solar)	Prince Albert	To provide cost effective electricity. Job creation, Viability in terms of energy source.	R 25,000,000
Business Hives	PAM area; Leeu-Gamka; Prince Albert; Klaarstroom	The project aims to development an environment or space for upcoming entrepreneurs, create employment opportunities & contribute to the economy.	R 8,000,000

Project Name	Project Description	Priority	Estimate Budget
Community Tourism Plan	Prince Albert Area	Provide employment opportunities for HDI`s guidelines for the development for community tourism opportunities	R 1 000 000
Treintjies river Green Resort	Prince Albert	Provide a Tourism product, recreational facilities, Including renovation and development of new structures, to enhance wellness of community and an alternative to nature tourism. A hub for Recreational tourism, including hiking, mountain biking, camping, etc.	R 53 000 000
Tourism Development Centres	Prince Albert; Klaarstroom; Leeu Gamka	Renovation of Municipal Buildings, equipping of Centres, Training of Personnel, operation	R 1 200 000
Community Learning Centre	Prince Albert	The development of Centre at the Thusong centre, where inhabitants can be trained w.r.t. life skills, basic skills, ABET, also online wit FET colleges and Universities, for formal training. Including negotiations with Higher Education and the equipment to handle online services	R 5 200 000
The upgrade of the furrow pipeline	Leeu Gamka	To minimize the loss in the furrow, currently estimated to be 50%, and thus ensuring additional water for domestic use. Creating opportunity for effective farming through ensured water supply	R 36 000 000
Filling station, with facilities	Klaarstroom	Preparing the environment and getting all the relevant permissions, drafting the documentation	R 170 000
Agri Tourism Hub	Prince Albert	Draft model and facilitate establishment thereof	R 1 500 000
Upgrading of the Airfield	Prince Albert	In order to ensure that the produce for export are secured, including storage facilities and cooling facilities	R 25 000 000
Weigh bridge on N1 and N12	Prince Albert Road; Klaarstroom	To ensure effective and efficient law enforcement	R 15 000 000
Community Food gardens	All Wards	To create food gardens including security and markets	R 3 000 000
Total cost			**R 557 160 000**

Implications for Prince Albert Local Municipality:

- In the SDF an project criteria matrix will be utilized to assess the IDP projects against specifically identified criteria in order to rank and prioritize these projects in spatial planning terms.

6.4.7 Role of settlements in regional and rural development[142]

Small and medium sized settlements are seen as bridges between the rural and urban environment. These settlements act as engine rooms and provide an economic base to develop a region. It is also a generally accepted principle that investment should only be directed to a settlement if the basic conditions are found to be suitable. Its economic driving force needs to be investigated and rated to provide employment opportunities. **Thus, as previously mentioned, low cost housing developments in the settlements and towns of Prince Albert Local Municipality should be carefully considered to avoid the creation of islands of poverty.**

More focus should be placed on these smaller settlements to develop it as entry points for investment, employment, service delivery or enterprise development. There is interdependence between rural and urban areas where there is a flow of money, people, goods and information. Investments in this environment will provide better access to markets, jobs and public services.

Small to medium settlements contribute to the region in the following manner:

- Demand for rural products.
- Centres where non-farming activities can grow.
- Centres where goods and services are produced and distributed.
- Areas that attract migrant labour to ease the pressure off larger urban centres.

Larger urban centres have a built-in growth dynamic based on a sufficient level of diversification. Smaller settlements have a different dynamic and the following trends can be seen:

- Demise of once-prosperous mining towns and railway towns.
- Decline in rural output and a focus on game farming, making these activities much less dependent on service centres.
- Changes in retail patterns and transport technology provide greater access to more distant regional centres.
- The growth of tourism in small centres.
- Larger centres have absorbed some of the functions of smaller settlements.
- An artificial dependence on state welfare with no real economic base
- The results of the amalgamation of a number of small settlements under centralised municipal management has weakened many settlements

[142] OFFICE OF THE PREMIER NORTHERN CAPE. 2012. 2 vols. Northern Cape Provincial Spatial Development Framework. Kimberley: Office of the Premier. 121 p.

6.4.7.1 Factors influencing growth and development of settlements

- Settlements originate to supply in the need of a specific service or goods to a group of people. Settlements therefore have different functions.
- Most developments are Central Places, being service centres to the surrounding areas, proving goods and services to the rural areas.
- Settlements can also have more specific functions such as tourism in the case of Prince Albert Local Municipality.
- Growth can change, as conditions affecting the need for the goods and services change or as a resource may be exhausted in mining town. Some settlements may flourish whilst others decline, causing an unequal settlements system.
- The location of a settlement also provides a certain amount of growth energy in relation to its location to infrastructure, transport routes, natural resources and large populations. Settlements close to larger metropolitan areas benefit from the adjacent larger populations, overflow and positive externalities. Smaller settlements located on traffic modes or along major traffic routes also benefit economically from more isolated centres.
- Possibly one of the largest factors contributing to economic growth is management and leadership through productivity, new strategies, new technologies and capital investment. The quality of the human resource base also has a critical influence over the growth of the settlement. Individuals, entrepreneurs, companies and government institutions have the power to either contribute or restrict growth in centres through its decisions.
- The comparative advantage that a settlement has in extending its goods and services beyond itself determines its growth. The extent in which a centre can extend its services and goods beyond its borders determines its importance in its region by bringing in new capital into circulation. Activities that bring in external capital are referred to as basic activities, whilst non-basic, secondary or internal activities only circulate existing capital and only maintain existing capital by providing goods and services internally. When basic activities are increased, a chain reaction occurs which causes a multiplier effect and leads to even more growth.
- Decline of settlements is linked with factors involving its reason of its existence. The changing technological framework and globalisation for instance. As soon as a centre cannot fulfill its function, it declines.
- Quality of life is related to a sense of place experienced. How much a town has developed an identity to differentiate itself from other centres is important. It encourages a sense of belonging and personal identification.

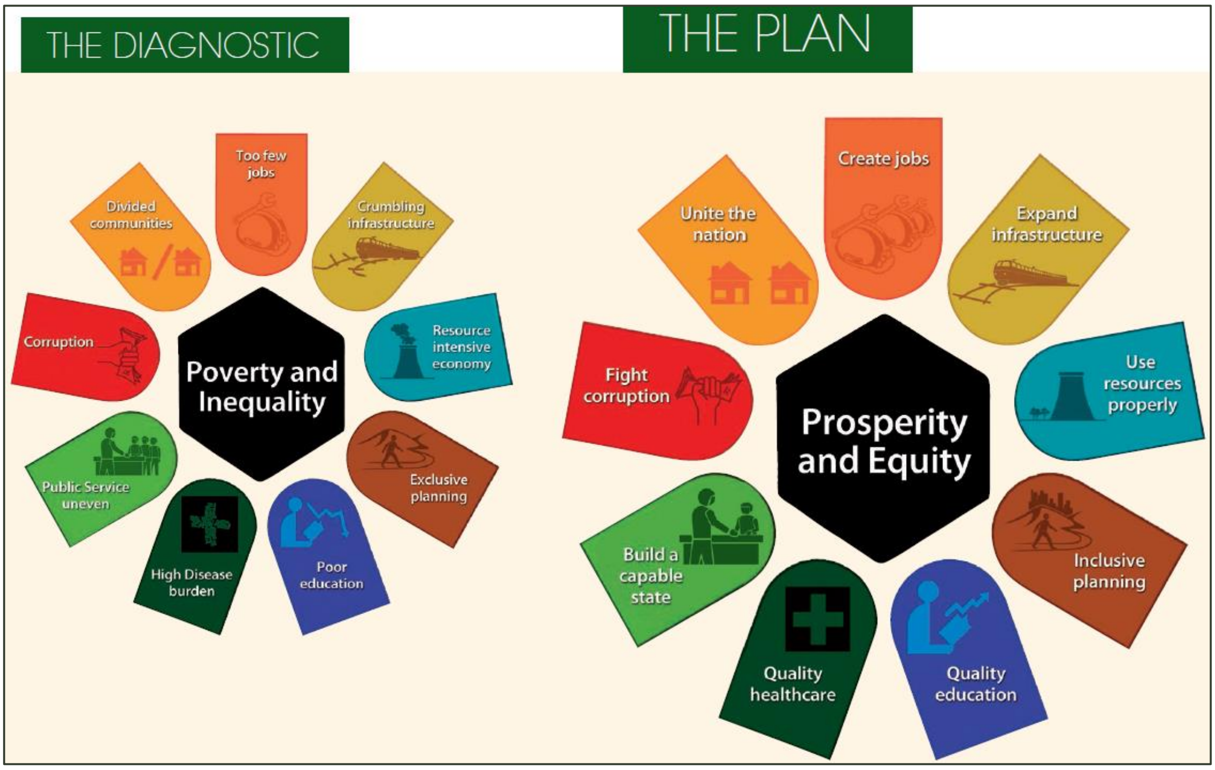
6.4.7.2 Implications of policies on rural development

National Development Plan (NDP) 2030[143]

The National Development Plan (2030) is aimed at reducing poverty and inequality. The plan asks for a major change in how we go about our lives. In the past, we expected government to do things for us. What South Africa needs is for all of us to be active citizens and to work together, so that people have what they need to live the lives they would like.

A government that works well doesn't just deliver more houses. It does more than that. It makes it possible for people to build or buy their own houses. This can be through earnings from work, savings, borrowing from the bank, family networks or government subsidies. Government can build schools, but it can't make children go to school and study hard. It needs parents and teachers to do that. Getting this right is much more difficult than building houses or schools. This means we have to look at things differently, and behave differently. The shortcomings of South Africa since 1994 and the identified plan to address these shortcomings are summarized in **Figure 69** below.

Figure 69 | National Development Plan



The National Development Plan 2030 identified the following actions to address the shortcomings of South Africa, namely:

- Create jobs
- Expand infrastructure
- Transition to a low-carbon economy
- Transform urban and rural spaces
- Education and training
- Provide quality health care
- Building a capable state
- Fight corruption

[143] SOUTH AFRICAN GOVERNMENT. 2011. National Development Plan 2030. http://www.npconline.co.za/MediaLib/Downloads/Home/Tabs/Tabloid_lowres_english.pdf. Date of access: 22 July 2013

- Transformation and unity

If one focus on the ***transformation of urban and rural spaces*** specifically, it entails the following:

- **Stop building houses on poorly located land and shift more resources to upgrading informal settlements, provided that they are in areas close to jobs.**
- Improve public transport.
- Give businesses incentives to move jobs to townships.
- Fix the gap in the housing market by combining what banks have to offer with subsidies as well as employer housing schemes.
- Give communal farmers, especially women, security of tenure.
- Put money into irrigation.

It is clear from the above that the development of low cost housing in areas with little to no job opportunities should be carefully considered, as variously mentioned above.

The New Growth Path (NGP)

The New Economic Growth Path is aimed at enhancing growth, employment and equity. The policy's principal target is to create five million jobs over the next 10 years. This framework reflects government's commitment to prioritising employment creation in all economic policies.

Central to the New Growth Path is a massive investment in infrastructure as a critical driver of jobs across the economy. The framework identifies investments in five key areas namely:

- Energy
- Transport
- Communication
- Water
- Housing.

The new growth path sees the infrastructure programme as a trigger to build a local supplier industry for the manufacture of the components for the build-programme.

Furthermore the new growth path identifies five other priority areas as part of the programme to create jobs, through a series of partnerships between the State and the private sector, namely:

- Green economy
- Agriculture
- Mining
- Manufacturing
- Tourism[144]

[144] **SOUTH AFRICAN GOVERNMENT INFORMATION. 2012. The New Growth Path. http://www.info.gov.za/aboutgovt/programmes/new-growth-path/. Date accessed: 23 July 2013**

Western Cape Provincial Spatial Development Framework - Rural Land Use Planning & Management Guidelines (2009)

Faced with escalating development pressures on the Western Cape's unique rural areas, the provincial government has taken the initiative to provide guidance to its social partners on land use planning and management outside the urban edge (i.e. in rural areas). Forming part of the roll-out of the Provincial Spatial Development Framework (PSDF), their objectives in introducing rural land use planning and management guidelines are:

- To promote sustainable development in appropriate rural locations throughout the Western Cape, and ensure that the poor share in the growth of the rural economy.
- To safeguard the functionality of the province's life supporting ecosystem services (i.e. environmental goods and services).
- To maintain the integrity, authenticity and accessibility of the Western Cape's significant farming, ecological, cultural and scenic rural landscapes, and natural resources.

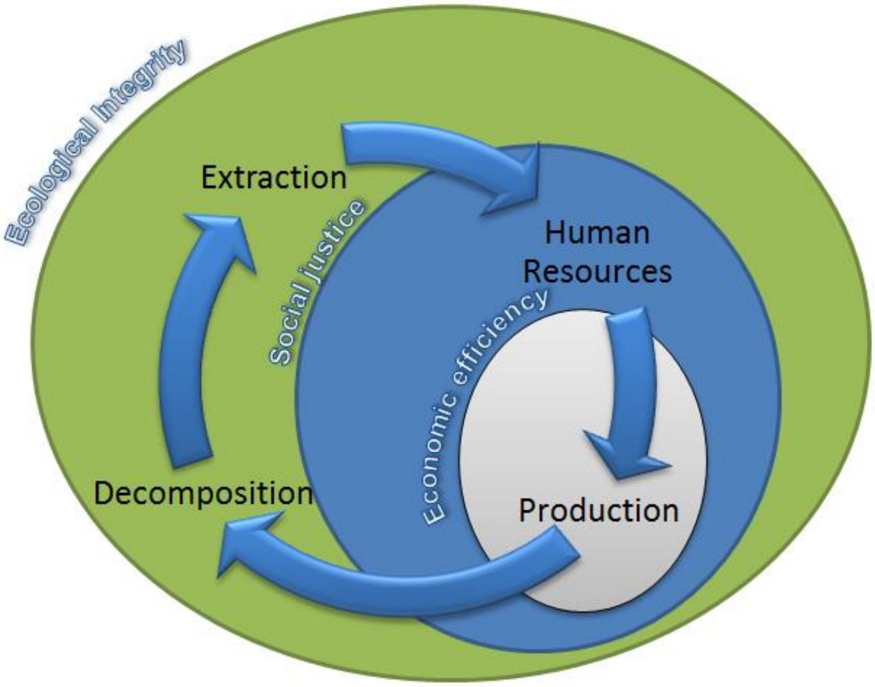
Furthermore the principles underpinning the Western Cape's rural land use management guidelines are:

- Decisions on rural development applications should be based on the following sustainable land use principles:
  - social inclusion,
  - effective protection and enhancement of the environment,
  - prudent use of natural resources, and
  - maintaining high and stable levels of economic growth.
- Good quality and carefully sited development should be encouraged in existing settlements.
- Accessibility should be a key consideration in all development decisions.
- New building development in the open countryside away from existing settlements should be strictly controlled regarding scale, height, colour, roof profile, etc.
- Priority should be given to the re-use of previously developed sites in preference to greenfields sites.
- All development in rural areas should be well developed and inclusive, in keeping and scale with its location, and sensitive to the character of the rural landscape and local distinctiveness.

6.5 Synthesis

The Build Environment, Socio-Economic Environment and the Bio-Physical Environment will be synthesised in this section. As proposed in the Guidelines for the Formulation of Spatial Development Frameworks the findings will be summarised using the Ecological Socio-Economic Relationship (ESER) Framework. The ESER framework provides the inter-relationships between the ecological integrity, social justice and economic efficiency. It is based upon the premise that economic efficiency is dependent on the quality of human resources and their ability to participate in the economic system.

Figure 70 | Ecological Socio-Economic Relationship Framework (ESER)

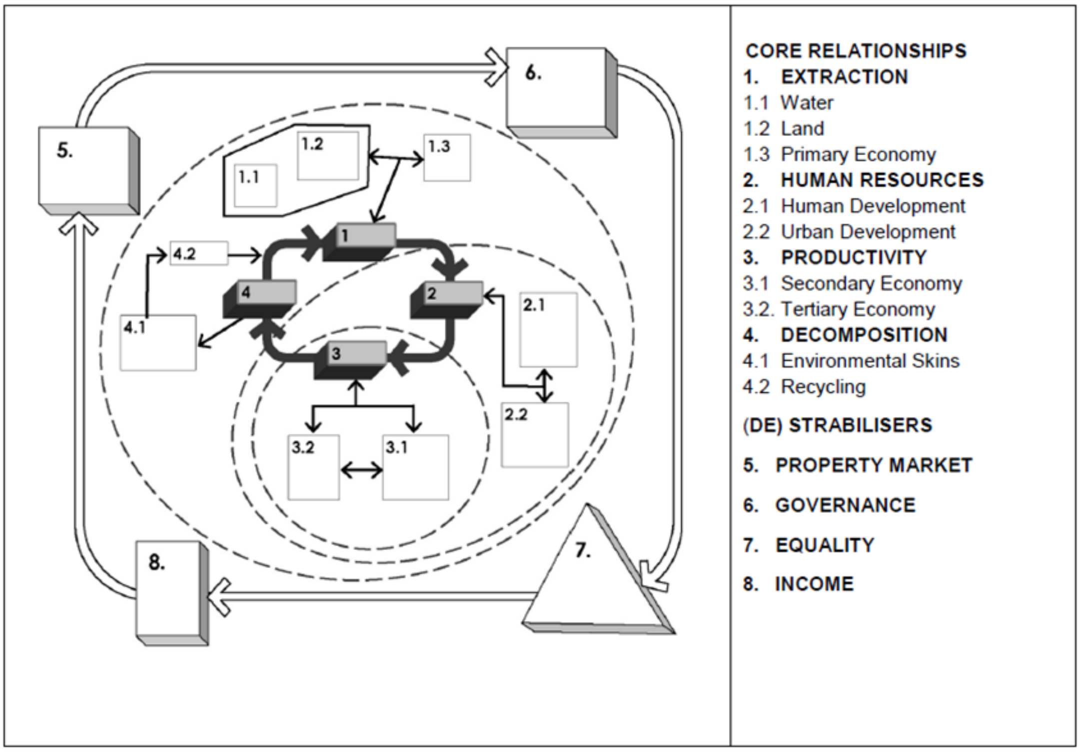


From **Figure 70** above it can be seen that four main components exist against the backdrop of the three environments. The first step in human activity may be extraction from the environment. Extraction takes place with the help of sufficient Human Resources. Production of the extracted resources takes place, which produces waste as a side product that will be decomposed in the natural environment. Waste should not exceed the capacity that the environment has to decompose it. All the components are inter-related and inter-dependant. A balance between the components needs to be found for the whole system to function properly and sustainably.

Furthermore, destabilisers and enablers exist in the closed cycle as depicted in **Figure 71** below. They are:

- The property market
- Governance and legislation
- Equity and inequality
- Funding and income

Figure 71 | The closed ecological cycle[145]



The **Figure 76** provides further details to the closed system, with sub-components to the four main activities of extraction, human resources, production and decomposition. The destabilisers and stabilisers are also indicated on the perimeter of the diagram to indicate its influence over the process.

[145] SOUTH AFRICA. Department of Rural Development and Land Reform. 2011. Guidelines for the Formulation of Spatial Development Frameworks. Draft 8. Pretoria. Government Press. 94 p.

6.5.1 SWOT Analysis

A SWOT analysis will be conducted to highlight the overall implications of the various trends, flows, overlays and relationships of the ESER Framework. The SWOT analysis is provided in **Table 41.**

Table 41 | SWOT Analysis

SWOT Analysis				
	Strength	**Weakness**	**Opportunity**	**Threat**
Extraction				
Water	There are three large dams situated in Prince Albert Local Municipality, namely Gamkapoort Dam, Oukloof Dam and Leeu-Gamka Dam and four perennial rivers, namely the Gamka, Dwyka, Aaps and Groot river.		Tourism related opportunities.	
Land	The Prince Albert Municipal area has an clay content of below 35%, thus a geotechnical study in	The soil in Prince Albert Local Municipality has a low ability to retain and supply nutrients.	Mudstone & Shale can be used as brick-making material.	The area is vulnerable to wind erosion and activities such as overgrazing.

SWOT Analysis				
	Strength	**Weakness**	**Opportunity**	**Threat**
	this regard is generally not required where development is planned.	The majority of the municipal land is non-arable with a low potential grazing land capability.	Arenite and Tillite are good construction material.	Invasive alien Cactus species a threat to the future grazing value of natural rangelands.
Primary Economy		The primary sector of the economy employs the fewest number of people, when compared to the secondary and tertiary sectors of the economy.	Agri-Tourism	A substantial decrease in term of the number of employment in the agriculture, hunting, forestry and fishing industry.
Human Resources				
Human Development				
Housing	57% of the municipal population owns a house.	Annual estimate household growth rate is 3.3%.	Ample vacant land exists for future housing developments.	
Employment		Prince Albert Local Municipality has an		

SWOT Analysis				
	Strength	Weakness	Opportunity	Threat
		unemployment rate of 19.4%.		
Crime	The crime rate of Prince Albert Local Municipality is lower than the crime rate of Laingsburg Local Municipality.			
Urban Development				
Housing Densities	Housing densities in towns amongst the higher cost houses are ±8 units per hectare or lower and densities amongst lower cost and subsidised housing are at approximately 40 units per hectare.			
Spatial Integration		A relative degree of spatial fragmentation exists in the town and	Future developments could be strategically placed as a means to	Spatial integration is not possible in Leeu Gamka and Klaarstroom due to

SWOT Analysis				
	Strength	**Weakness**	**Opportunity**	**Threat**
		settlements of Prince Albert Local Municipality.	bridge the spatial divide in Prince Albert.	the physical environment.
Quality of Urban Environment	The rich architecture of Prince Albert.	The quality of the Leeu Gamka, Klaarstroom and Prince Albert Road urban environments are weak.	The rich heritage of Prince Albert is a tourist attraction.	Certain new developments could threaten the rich historic character of Prince Albert. Non-maintenance of tarred roads in the urban areas is a threat to property value.
Access to Services	The main roads are in an acceptable condition. 96% of the local population has access to water either within their houses or at least a yard connection.	The lower order roads in rural areas need maintenance. 3G signal in the municipal area is restricted to Prince		

SWOT Analysis				
	Strength	**Weakness**	**Opportunity**	**Threat**
	85% of households have access to flush or chemical toilets. 86% of the local population has access to electricity. 75% of households have access to refuse removal.	Albert and Leeu Gamka.		
Productivity				
Secondary Economy	The number of people employed in the secondary sector of the economy has increased substantially from 13%			

SWOT Analysis				
	Strength	**Weakness**	**Opportunity**	**Threat**
	in 2001 to 32% in 2011.			
Tertiary Economy	The number of people employed tertiary sector is the highest sector of employment.			Tertiary industry decreased.
Decomposition				
Solid Waste		The Prince Albert waste disposal site is the only site with a permit, but is violating the terms thereof.	Employment opportunities through recycling, compost making and potential energy generation. Opportunity to be used for wood fuel.	Poor management of solid waste are a threat to the environment and could become a health hazard.

SWOT Analysis	Strength	Weakness	Opportunity	Threat
Waste Water	The Klaarstroom and Leeu Gamka WWTW's are adequate for future development in the short and long term.	The Prince Albert WWTW is not adequate for future development in the short or long term. In terms of the waste water treatment plants compliance to standards, only the Prince Albert WWTW is acceptable the rest are poor.		Poor management of waste water are a threat to the environment and could become a health hazard.
Storm Water		No storm water master plan exists.		
Atmospheric Pollution	Due to very limited industrial activity, no real air pollution risks exist.			

SWOT Analysis				
	Strength	**Weakness**	**Opportunity**	**Threat**
Aquatic Pollution	The quality of the perennial rivers situated within PALM ranges from fairly good to good.			
Cemeteries	The cemeteries located within the borders of Prince Albert Local Municipality are in a fairly good condition.		The capacities of the cemeteries are sufficient.	
Stabilisers and Destabilisers				
Property Market	High sales prices of farm land and properties in Prince Albert.			
Governance and Legislation		Non-payment for services has increased substantially. Prince Albert Local	A decline in rates arrears.	

SWOT Analysis				
	Strength	**Weakness**	**Opportunity**	**Threat**
		Municipality is heavily dependent on additional external funding.		
Equity and Inequality	There have been continual improvements in the non-monetary well-being (for example, access to piped water, electricity and formal housing) of the population of Prince Albert Local Municipality. Social assistance grants (mainly the Child Support Grant, the Disability Grant and the Old-age Pension) alter the levels of inequality only marginally, but have been crucial in reducing poverty among the	16% of the population receives social grants. (2011)		

SWOT Analysis				
	Strength	**Weakness**	**Opportunity**	**Threat**
	poorest households. In Prince Albert Local Municipality the number of people living in poverty decreased from 83.15% in 2001 to 65.26% in 2011.			
Funding and Income		Local Government revenues come primarily from grants from Central Government Funds and Municipal Rates. The Municipality is made up of various farms, which do not contribute to the municipal income base, whilst the urban population, that are not indigents, are few.		The Local Municipality has no sustainable source of income.

7 Spatial Development Framework

7.1 Strategic Goals, Objectives, Strategies and Interventions

7.1.1 Overall Objectives

The various principles as summarised in section 5.2 can be translated into a set of collective development objectives that form the overarching objectives of the Spatial Development Framework, namely:

- To promote social justice
- To promote spatial sustainability;
- To promote efficient development;
- To promote spatial resilience; and
- To ensure good administration.

Table 42 | Development Objectives

Goals	Objective	Strategy	Development Intervention
A) Social Justice	**A1)** The objectives to addresses social justice entail equal access to opportunities, facilities or networks. Through planning, all residents irrespective of race, gender, ethnicity, faith or income should be dealt with in an equitable way. The objective of equity also refers to the manner in which planning will address the inequitable legacy inherited from the past.	**A1(i)** The development of sustainable human settlements and renewal of existing settlements.	• Move away from the current pattern of housing delivery towards an approach of integrated, inclusive and sustainable settlement creation. • Employ the principles of Breaking New Ground in all new settlements as well as in the upgrading and renewal of existing settlements. • Identify land for housing projects in close proximity to core areas, and with the emphasis on improved linkages.
B) Spatial Sustainability	**B1)** The objective of sustainability requires the sustainable management and use of both natural and man-made resources. Land use and development decisions must promote a harmonious relationship between the built and the natural environment while ensuring that land development is sustainable over the long term. Other aspects that need to be considered in the sphere of sustainability are conservation, environmental health and degradation, economic sustainability and community satisfaction. The principle of sustainable development is particularly relevant as far as the Biosphere is concerned. Finding means of achieving balance between conservation and economic development is an important focus area of the Spatial Development Framework.	**B1(i)** The sustainable management of the natural environmental assets and heritage.	• Identify and isolate the valuable natural assets and escalate development proposals that affect these to sector departments for development recommendations.
		B1(ii) The promotion of sustainable rural development.	• Identify and protect high potential agricultural land.
		B1(iii) The promotion of tourism development.	• Protection of heritage significant areas. • Ensure that a continuous ecological and open space system is created in Prince Albert Local Municipality. • Ensure the conservation and sustainable management of the protected and conservation areas. • Identify, integrate and coordinate tourism development opportunities and activities within the Prince Albert Management Area. • Strengthen linkages to tourism development areas. • Recognise the important role the private sector and land owners play in tourism development.
C) Efficiency	**C1)** The objective of efficiency requires that optimal development levels and functionality must be achieved with the minimum expenditure of resources. The concept relates to both functional and operational aspects and includes issues such as growth management, optimal utilisation of strategic locations, usability, mobility, productivity, and accessibility.	**C1(i)** The integration of various areas in Prince Albert Local Municipality to form a well-functioning space economy:	• Channel development into a system of nodes and corridors. • Development must be localised in specific strategic areas where there can be a focused effort on the provision of engineering services, transportation and land use integration. • Consolidate existing areas first, before creating new development areas.
		C1(ii) The promotion and facilitation of economic development:	• Support and develop strategic locations that contain the right characteristics to enable sustainable economic development and which contribute to the overall spatial efficiency and sustainability. • Provide guidance in terms of the preferred development directives and the application process.
		C1(iii) The development and improvement of linkages with surrounding areas of importance:	• Develop a movement network that supports the spatial development focus areas. • Create a strategic network of movement linkages in Prince Albert Local Municipality, and between major regional centres. • Ensure land use and transportation integration.

Goals	Objective	Strategy	Development Intervention
		C1(iv) Service delivery, specifically focusing on providing sufficient capacity in development priority areas:	• Ensure the provision of service infrastructure in accordance with spatial requirements (i.e. the integration of spatial planning and engineering services master planning). • Identify the strategic areas of opportunity that should be the focus areas for capital investment in engineering services infrastructure.

7.2 Spatial Planning Categories for Land Use Management

A system is proposed that would aid the Land Use Management System of the local authority. The system provides "Spatial Planning Categories" (SPC) of land for specific uses, which is displayed geographically on **Map 49** below. Any application for development can then be measured against the respective SPC to measure its suitability for the area and further studies or motivations for the development if need be.

The Rural Land Use Planning & Management Guidelines of the WCSDF with some additional SPC's was used to ultimately determine the Spatial Planning Categories in **Table 43** below. The Spatial Planning Categories provide the basis for managing rural land uses and gives guidance in terms of what activities may occur within each category.

Table 43 | Spatial Planning Categories

SPATIAL PLANNING CATEGORIES		
SPC - A	**Core 1**	**Critical Biodiversity Area** **Formal Protected Area**
SPC - B	**Core 2**	**Ecological Support Area**
SPC - C	**Buffer 1**	**Other Natural Areas (large intact land or natural remnants adjacent to CBA or ESA**
SPC - D	**Buffer 2**	**Other Natural areas transformed or used for extensive agriculture**
SPC - E	**Intensive Agriculture**	**No Natural Area Remaining**
SPC – F1	**Urban Related Areas**	**No Natural Area Remaining**
SPC – F2	**Industrial Areas**	**No Natural Area Remaining**
SPC – G	**Surface Infrastructure**	**No Natural Area Remaining**

7.2.1 SPC A & B – Core Area 1 & 2

Table 44 | SPC A & B: Core Area 1 & 2

SPC A: CORE 1		
SUB - CATEGORY		**DESCRIPTION**
A.a	Formal Protected Areas	Areas designated in terms of legislation for biodiversity conservation, defined categories of outdoor recreation and resource use. Conservation purposes are purposes normally or reasonably associated with, the use of land for the protection of the natural and/or built environment, including the protection of the physical, ecological, cultural and historical characteristics of land against undesirable change (adapted from Spatial Planning and Land Use Management Act).
A.a.1	**<u>Wilderness Areas (declared in terms of NEMPA 57 of 2003)</u>** Areas characterised by their intrinsically wild and pristine appearance and character, or that are capable of being restored to such, and which are undeveloped, without permanent improvements or human habitation. Such areas are declared to: • protect and maintain the natural character of the environment, biodiversity resources, associated natural and cultural resources; • provide environmental goods and services; • provide outstanding opportunities for solitude and primitive outdoor experiences; and • provide controlled access to those who understand and appreciate wilderness, and those who wish to develop such an understanding.	
A.a.2	**<u>Special Nature Reserves (declared in terms of NEMPA[146] 57 of 2003)</u>** Areas characterised by sensitive, ecologically outstanding ecosystems or natural habitats, natural communities' populations or species, or unique geological or biophysical features conserved primarily for scientific research, educational and limited nature-based recreational purposes.	
A.a.3	**<u>National Parks (declared in terms of NEMPA 57 of 2003)</u>** Designated to protect areas of national or international biodiversity importance; or containing a representative sample of South Africa's natural systems,	

[146] National Environmental Management: Protected Areas Act 57 of 2003

	scenic areas or cultural heritage sites; or the ecological integrity of one or more ecosystems. National parks provide spiritual, scientific, educational, recreational and tourism-related opportunities which are mutually and environmentally compatible and can contribute to local and regional economic development.
A.a.4	**<u>Nature Reserves</u>**, including provincial, local authority and registered private nature reserves (declared in terms of NEMPA 57 of 2003) Areas of significant ecological, biophysical, historical, or archaeological interest or that are in need of long-term protection for the maintenance of its biodiversity or for the provision of environmental goods and services. Nature reserves are declared to • supplement the systems of wilderness areas and national parks in South Africa; • sustainable provide natural products and services to local communities; • enable the continuation of traditional resource uses; and • provide nature-based recreational and tourism opportunities.
A.a.5	**<u>Protected Environments (declared in terms of NEMPA 57 of 2003)</u>** Areas may be declared as a protected environment to: • Conserve the area as a buffer zone for the protection of a wilderness area, special natural reserve, national park, world heritage site or nature reserve. • Enable owners of land to take collective action to conserve biodiversity on their land and to seek legal recognition for such actions. • Protect the area if it is sensitive to development due to its – • Biological diversity; • Natural, cultural, historical, archaeological or geological value; • Scenic and landscape value; or • Provision of environmental goods and services. Protect a specific ecosystem outside of a wilderness area, special nature reserve, natural park, world heritage site. Ensure that the use of natural resources is sustainable. Control change in land use if the area is earmarked for declaration as, or inclusion in, a wilderness area, national park or nature reserve.

	Forest Wilderness Areas/Forest Nature Reserves (in terms of s 8 [1] of National Forests Act 84 of 1998) Declared forest wilderness areas and forest nature reserves include: • natural forests, i.e. tract of indigenous trees whose crowns are largely contiguous and which comprise all other floral and faunal forest elements; • woodlands, i.e. a group of indigenous trees which are not a natural forest, but whose crowns cover more than 5% of the area bounded by the trees forming the perimeter of the group: and • natural habitats or ecosystem components.	
	World Heritage Sites (declared in terms of World Heritage Convention Act 49 of 1999) Cultural[147] or natural[148] areas that has been: • Included on the World Heritage List, or the tentative list of the Republic, and has been proclaimed as a World Heritage Site, or • Proclaimed to be a special heritage site for management in accordance with the Act (such areas cannot be referred to as a World Heritage Site).	
A.b	Critical Biodiversity Areas	Areas identified through systematic biodiversity plans as irreplaceable in terms of meeting representation and/or pattern targets. These areas are known to support high biodiversity or recognized as being important for more than one taxonomic group (e.g. plants and birds). These areas do not have statutory conservation status, although they have been identified in terms of approved bioregional plans.
A.c	Freshwater Ecosystem Priority Areas (FEPAs)	Wetlands and rivers identified as Freshwater Ecosystem Priority Areas (FEPAs), including a 100m buffer as required by the National Freshwater Ecosystem Priority Areas (NFEPA) Project Guidelines.
SPC B: CORE 2		
SUB - CATEGORY		**DESCRIPTION**

[147] For the purpose of the Convention Concerning the Protection of the World Cultural and Natural Heritage, the following shall be considered as 'cultural heritage': monuments, architectural works, works of monumental sculpture and painting, elements of structures of an archaeological nature, inscriptions, cave dwellings and combinations of features, which are of outstanding universal value from the point of view of history, art or science, groups of buildings, groups of separate or connected buildings which, because of their architecture, their homogeneity or their place in the landscape, are of outstanding universal value from the point of view of history, art of science, sites, works of man or the combined works of nature and man, and areas including archaeological sites which are of outstanding universal value from the historical, aesthetic, ethnological or anthropological point of view.

[148] For the purpose of the Convention Concerning the Protection of the World Cultural and Natural Heritage, the following shall be considered as 'natural heritage': natural features consisting of physical and biological formations or groups of such formations, which are of outstanding universal value from the aesthetic or scientific point of view, geological and physiographical formations and precisely delineated areas which constitute the habitat of threatened species of animals and plants of outstanding universal value from the point of view of science or conservation, natural sites or precisely delineated natural areas of outstanding universal value from the point of view of science, conservation or natural beauty.

B.a	Ecological Support Areas	Areas identified through systematic biodiversity plans as areas not yet exhibiting high levels of biodiversity loss, but which should be protected and restored in order to ensure biodiversity patterns and that ecological process targets can be met.
B.b	Mountain Catchment Areas	Areas declared, in terms of the Mountain Catchment Areas Act 63 of 1970, as mountain catchment areas that provide for the conservation, use, management and control of such land.

Objective:

- These areas must be protected and the development of them is not allowed under normal circumstances.

Policies:

- Development of biodiversity areas must be facilitated with the help of innovative public-private partnerships, such development must be extremely limited and contained within the natural environment in the most non-intrusive manner possible – both in terms of the building footprint, but also in terms of the visual impact on the landscape.
- Non-consummative activities such as passive outdoor recreation activities and tourism to be allowed. The development of any new protected area must be researched and the integration of such areas with their surrounding and uses must form part of such a research program.

Table 45 below indicates the Central Karoo Biodiversity Assessment recommendations with regards to specific biodiversity-compatible land uses for SPC A & B. These recommendations are in line with the WC Rural Land Use Planning & Management Guidelines and links to the desired management objectives of the Critical Biodiversity Areas.

Table 45 | Recommended biodiversity-compatible land use guidelines matrix

CBA Map Category:	Formal Protected Areas	Critical Biodiversity Area	Ecological Support Area
Desired Management Objective:	Maintain natural land. Rehabilitate degraded to natural or near natural and manage for no further degradation.		Maintain Ecological processes.
PSDF Spatial Planning Category:	Core 1	Core 2	Core 3
1) Conservation	LAND USE GOVERNED BY THE NATIONAL ENVIRONMENTAL MANAGEMENT: PROTECTED AREAS ACT (NEM:PAA) AND A PROTECTED AREA MANAGEMENT PLAN	Yes	Yes
2a) Intensive Agriculture (includes nurseries and space extensive agricultural enterprises)		No	Restricted
2b) Extensive Agriculture		Yes	Yes
2) Holiday Accommodation		Yes	Yes
4a) Rural Residential Consolidation of rural erven for conservation		Yes	Yes
4b) Rural Residential On farm workers settlement		Restricted	Yes
5a) Tourist & Recreational Facilities – Low Impact: Lecture rooms, restrooms, restaurants, gif shops & outdoor recreation.		Restricted	Yes
5b) Tourist & Recreational Facilities – High Impact: golf, polo & housing eco-estates		No	No
6a) Rural Business – Place Bound		Restricted	Yes
6b) Rural Business- Non Place Bound		No	Yes
7) Rural Industry		No	Yes
8) Small Holdings		No	Yes

CBA Map Category:	Formal Protected Areas	Critical Biodiversity Area	Ecological Support Area
Desired Management Objective:	**Maintain natural land. Rehabilitate degraded to natural or near natural and manage for no further degradation.**		**Maintain Ecological processes.**
PSDF Spatial Planning Category:	**Core 1**	**Core 2**	**Core 3**
9) Community Facilities & Institutions		Restricted	Yes
10) Infrastructure Installations		Restricted	Yes
11a) Existing Settlements (Urban Expansion)		No	No
11b) New Settlements		No	No

Biodiversity sector land use recommendations:

- Yes: Encouraged/Permitted from a biodiversity standpoint
- No: Discouraged/Not Permitted from a biodiversity standpoint
- Restricted: Possible under strict conditions ONLY

7.2.2 SPC C & D – Buffer 1 & 2

Table 46 | SPC C & D: Buffer 1 & 2

SPC C: BUFFER 1		
SUB - CATEGORY		**DESCRIPTION**
C.a	Ecological Corridors	Linkages between natural habitats or ecosystems that contribute to the connectivity of the latter and to the maintenance of associated natural processes.
C.a.i	**Rivers or riverbeds (incl. 32 m buffer) (in terms of NEMA[149] 107 of 1998)** All other perennial and non-perennial rivers and wetlands, including a buffer of 32m based on the generic buffer width used for aquatic features in the Listing Notices of the Environmental Impact Assessment Regulations, 2010 (GN R544, GN R545 and GN R546).	
C.b	Other Natural Areas	Large intact portions and remnants of natural or near natural vegetation not designated as CBA or ESA, especially in proximity/adjacent to CBAs and or ESAs, as identified though systematic bioregional plans.
SPC D: BUFFER 2		
SUB - CATEGORY		**DESCRIPTION**
D.a	Extensive Agricultural Areas	Agricultural areas covered with natural vegetation, used for extensive agricultural enterprises, e.g. indigenous plant harvesting, extensive stock farming, game-farming, eco-tourism.
D.a.i	Game Farming	
D.a.ii	Extensive Stock Farms	

[149] National Environmental Management Act 107 of 1998.

Objective:

- Create a continuous network of natural resources areas throughout the municipality that maintain ecological processes and provide ecosystem services (e.g. benefits that people derive from ecosystems.
- To create a continuous network of natural resources areas throughout the Municipal area that maintain ecological processes and provide ecosystem services and these include the provision of water, arable soil, disaster amelioration, recreational opportunities, etc.

Policies:

- The management of such systems must honour long-standing benign uses by local people.
- No structures and permanent human habitation will be permitted below the 1:100 year flood line and or any other local river or storm water component in the municipality.
- In the case of existing building, resorts and developments below the flood line and or where the flood line has been altered, the development and or redevelopment may be allowed on the condition that a comprehensive flood management plan is drawn up and approved by the various authorities. Such a plan must focus on flood proofing buildings, construction of buildings on fill above the flood level, buildings on piers and columns and taking into consideration the flood height, duration of floods and velocity of water flow.

7.2.3 SPC E – Intensive Agriculture

Table 47 | SPC E: Intensive Agriculture

SPC E: INTENSIVE AGRICULTURE		
SUB - CATEGORY		**DESCRIPTION**
E.a	Cultivated Areas	Agricultural areas used for intensive agricultural practices, e.g. crop cultivation, vineyards, intensive stock farming on pastures.
E.b	Plantations and Woodlots	Plantations, i.e. group of trees cultivated for exploitation of the wood, bark, leaves of essential oils in the trees; forest produce, i.e. anything which appears of grows in such plantation including any living organisms and any product of it.

Objective:

- The protection of high potential yet poorly utilised agricultural land.
- The protection and consolidation of existing and potential agricultural landscapes.
- To facilitate sustainable agricultural development, land and agrarian reform and food security.

Policies:

- High potential agricultural land must **as far as** possible be excluded from non-agricultural development and must be appropriately utilised in accordance with sustainable agriculture principles.
- Land-users causing unacceptable degradation of the natural environment are responsible for rehabilitation of mismanaged natural agricultural resources.
- Agricultural activities must be monitored and regulated in terms of the Conservation of Agricultural Resources Act 43 of 1983. In particular, restoration and reclamation of eroded land.

7.2.4 SPC F1 – Urban Related Areas

Table 48 | SPC F1: Urban Related Areas

SPC F1: URBAN RELATED AREAS		
SUB - CATEGORY		**DESCRIPTION**
F.1.a	Main Town	Towns accommodating Category A Municipalities (i.e. metropolitan areas and the seat (capital town) of Category C Municipalities (District Municipalities),
F.1.b	Local Town	• Prince Albert
F.1.c	Rural/Institutional Settlements	• Leeu Gamka • Klaarstroom • Prince Albert Road (Railway)
F.1.d	Institutional Areas	Areas designated for schools, colleges, churches and mosques.
F.1.d.i	Place of Instruction	

F.1.d.ii	Place of Worship	
F.1.d.iii	Institution	
F.1.e	Authority Areas	Areas designated for governmental purposes and other official uses, e.g. municipal offices, offices of parastatals (Telkom, Eskom).
F.1.f	Residential Areas	Areas designated for residential purposes, e.g. single title erven, group housing, estates, 'GAP housing'[150] and residential smallholdings.
F.1.f.i	Single Residential House	
F.1.f.ii	Group Housing	
F.1.f.iii	Guest House	
F.1.f.iv	Flats/Residential Building	
F.1.f.v	Incremental Housing	
F.1.f.vi	GAP Housing	
F.1.f.vii	Low Cost Housing	
F.1.g	Light Business Areas	Areas designated for activities associated with retail and service industries, e.g. shops, restaurants, professional offices and low intensity commercial and mixed-used activities on neighbourhood level.
F.1.g.i	General Business Zone	
F.1.g.ii	Neighbourhood Business Zone	
F.1.h	Other Business Areas	Areas designated for other business activities associated with service trade industries, e.g. industries associated with motor vehicle sales, repairs, service stations and associated facilities.
F.1.h.i	Service Station	
F.1.i	SMME Incubators	Areas designated for Small Medium and Micro Enterprises (SMMEs) and associated infrastructure and services focused on

[150] 'GAP housing' refers to a category of residential units that falls between the housing units provided by the state (< R100 000) and those provided by the private sector (>R250 000). The GAP housing market typically caters for the people earning between R3 500 and R10 000 per month, which is too little to enable them to enter the private property market, yet too much to quality to state assistance.

		community-based service trades and retail.
F.1.j	Mixed Use Development Areas	Areas designated for innovative combinations of land use, e.g. residential/light business; light industry/light business.
F.1.k	Cemeteries	Cemeteries and formal burial parks, excluding crematoriums.
F.1.l	Sports fields & Infrastructure	Dedicated sports fields together with the associated infrastructure, parking areas, and services.
F.1.m	Transport Infrastructure	Area designated for infrastructure and services associated with public and private transport such as airports, landing strips, taxi and bus depots, etc.
F.1.n	Resorts & Tourism Related Areas	Resorts and tourism-related nodes, and amenities that form part of a designated Hospitality Corridor/Precinct.
F.1.o	Farmsteads & Outbuildings	Main farmsteads, including on-farm infrastructure required for farm logistics, e.g. houses, sheds, packing facilities, etc.
F.1.p	Urban Agriculture / Community Gardens	Areas designated for the purpose of establishing community gardens within urban settlements.
F.1.q	Urban Green Areas	Municipal open spaces (including playgrounds) that form in integral part of the urban structure (including areas zoned Public Open Space and Private Open Space).
F.1.q.i	Public Park	
F.1.q.ii	Landscaping	

Objective:

- Develop sustainable towns/settlements that will promote the well-being of the residents.
- End apartheid style planning designs.
- Promote sustainable activities.

Policies:

- Urban edge: prevent outward sprawl, contain and integrate spatial planning, protect valuable natural resources and prevent the fragmentation of agricultural land.
- Nodes: focus development on identified nodes in terms of the hierarchy identified.
- Activity streets: focus non-residential uses on activity streets.
- Densification and in-fill planning: efficient use of existing resources, protection of natural assets, promotes public transport development and improvement pedestrian access.
- Spatial Planning Categories to inform future development applications and Land Use Management System.
- "Breaking New Ground" (BNG) principles for neighbourhood developments.
  - Urban open space: maintain visual quality, attractiveness, liveability and investment.
  - Town image: celebrate town entrances; provide landmark sites, no obstructions to important views and vistas, well designed public urban spaces, planting of trees, provision of public furniture.

7.2.5 SPC F2 – Industrial Areas

Table 49 | SPC F2: Industrial Areas

SPC F2: INDUSTRIAL AREAS		
SUB - CATEGORY		**DESCRIPTION**
F.2.a	Agricultural industry	Agriculture-related industrial development, e.g. silos, wine cellars, packing facilities, excluding abattoirs.
F.2.b	Light industry	Areas designated for light industrial activities associated with the service industry (e.g. repair of motor vehicles) including warehouses and service stations.

F.2.c	General Industry	Areas designated for general and more intensive industrial activities, which could potential have a negative impact on the character and the primary activities of business and residential areas.
F.2.d	Nuisance Industry	Areas designated for robust industrial activities, e.g. chemical works, brewery, piggeries, manure, processing of hides, abattoirs, stone crushing, crematoriums.
F.2.e	Extractive Industry	Settlements and infrastructure associated with multiple consumptive resource extraction, e.g. mining.

Objective:

- To establish industrial Precincts in the various towns and the provision of infrastructure to harvest and process the resources available.

Policies:

- To identify an Industrial Precinct for each of the towns where the opportunity for manufacturing exist.
- Ensure the sustainable use and protection of the environment.
- Ensure that the development and design of Industrial areas is in a manner that supports the existing economy.
- A water management strategy and plan in conjunction with the Department of Water Affairs should be developed to provide policy guidance and implementable measures for water management in a water scarce area. Such a plan needs to be sensitive of the impact of mining and hydraulic fracking on the District's water resources. (Draft CKDM SDF)

7.2.6 SPC G– Surface Infrastructure & Buildings

Table 50 | SPC G: Surface Infrastructure & Buildings

CATEGORY G: SURFACE INFRASTRUCTURE & BUILDING		
SUB - CATEGORY		DESCRIPTION
G.a	National roads	National roads proclaimed in terms of the National Roads Act 7 of 1998.
G.b	Main roads	Provincial and regional roads proclaimed in terms of the Roads Ordinance 19 of 1976.

G.c	Minor roads	Regional and local roads proclaimed in terms of the Roads Ordinance 19 of 1976.
G.d	Public Streets	Public streets and parking areas within main town and rural settlements.
G.e	Heavy Vehicle Overnight Facilities	Areas designated for heavy vehicle parking and overnight facilities.
G.f	Railway lines	Railway lines and associated infrastructure.
G.g	Power lines	Power lines and associated sub-stations and infrastructure.
G.h	Telecommunication infrastructure	Any part of the infrastructure of a telecommunication network for radio/wireless communication including, voice, data and video telecommunications, which may include antennae; any support structure, equipment room, radio equipment and optical communications equipment provided by cellular network operators or any other telecommunication providers and all ancillary structures needed for the operation of telecommunication infrastructure.
G.i	Renewable energy structures	Any wind turbine or solar voltaic apparatus, or grouping thereof, which captures and converts wind or solar radiation into energy for commercial gain irrespective of whether it feeds onto an electricity grid or not. It includes any appurtenant[151] structure or any test facility which may lead to the generation of energy on a commercial basis.
G.j	Dams & Reservoirs	Major dams and reservoirs.
G.k	Sewerage Plants and Refuse Areas	Areas designated as municipal and private sewerage treatment plants and refuse areas.

[151] **Appurtenant structure means any structure or accessory necessary for, or directly associated with generation of renewable energy.**

Objective:

- The maintenance of an adequate road and railway transport system throughout the Municipality.
- Institute a centralised commuter bus service for residents and workers commuting daily between the various towns of the municipality.
- Promote the development of renewable energy supply schemes.
- Accelerate the deployment of telecommunication infrastructure to enhance effective development in rural areas.
- To explore and encourage the use of renewable energy sources.

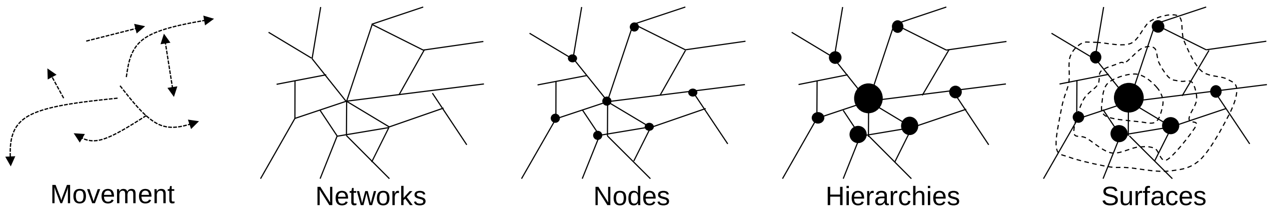
Policy:

- Implement the Local Integrated Transport Plan (Prince Albert Local Municipality, 2009).
- Development of a Prince Albert Local Municipality electricity master plan.
- Water is the most vital natural form of capital (resource) of the municipality and must be invested in the most efficient and equitable manner
- Development of an Integrated Waste Management Plan and Strategy.
  Pollution and degradation of the water resources must be prevented.
- The construction of telecommunication infrastructure must be carefully placed to avoid visual impacts on landscapes of significant symbolic, aesthetic, cultural or historic value and should blend in with the surrounding environment as far as possible.
- Sewerage Plants and Refuse Areas should comply to NEMA regulations.

7.3 Conceptual Framework

The spatial framework is developed though an interrelated set of nodes, networks and surfaces. The essence of development in this system is the movement of people, goods and services that produces the basic impetus for developing functional relationships between otherwise independent and unrelated elements. The movement of people, goods, and services are channelled along specific routes that describe a network of interaction. Where networks intersect the opportunity for people, goods and services develop to interact and this gives rise to activity nodes. The intensity of interaction gives rise to the development of a hierarchy of nodes of different sizes depending on the level of interaction taking place in a node. This one dimensional system of networks and nodes are tied together through surfaces that fill the areas between the nodes and networks.

Figure 72 | The Nodal System



A nodal system has the following characteristics with the subsequent implications for the SDF:

Table 51 | A nodal system and the consequences for the SDF

Characteristics of a nodal system	Implications for the SDF
1. Movement sustains the system. If movement stops, the system disintegrates conversely, the better or higher the volume of movement of people, goods and services are the more vibrant and viable the system is.	The N1, N12 and the R407 is characterised by a high to very high level of movement, which opens up economic opportunities. The rest of the municipal area is however characterised by a poor network of roads and low movement levels are experienced. The modes of transport, and even the fact that households are not mobile or constraint in their mobility limits the options for the Council.
2. A change in the extent and intensities of movement causes changes in the shape and structure of the system. For example, increased road traffic creates the opportunity for better quality roads and business opportunities.	The best prospect for an improved spatial structure is in the areas subject to higher intensities of movement. The Council can do little to improve movement apart from continuously improving access to key areas and facilities.
3. An open system tends to sustain its structure and form over very long periods.	The high energy levels (N1 and N12) create an opportunity to achieve structural changes.
4. From varying starting points and conditions, systems with more or less the same type of energy inputs and organisation, develop similar end conditions and structures. Urban areas across the world have more or less the same structural characteristics notwithstanding	The structural elements of the spatial system are recognised. The relative strength of the system components, business, residential, industrial development, agriculture, etc. is determined by local economic growth

Characteristics of a nodal system	Implications for the SDF
diverse starting points and conditions.	imperatives.

In order to address spatial issues and restructure development in the municipality spatial restructuring tools are required. To ensure the alignment with provincial spatial policies six spatial structuring elements have been identified and are proposed to guide future development in the municipality. These tools should be used in a practical manner to ensure sustainable high quality settlements.

The key objective of the structuring elements is as follows:

- Contain urban sprawl
- Promote urban and social integration
- Promote higher densities
- Create quality urban environments
- Promote pedestrian friendly environments and movement patterns
- Create a sense of place
- Enhancement of investment opportunities
- Simplifying decisions-making regarding development applications.

The spatial tools used include:

- Urban Edge
- Nodes
- Corridors
- Activity Streets
- Densification
- Smart growth
- Surfaces

The spatial development concept starts by identifying the **natural structuring elements** that exist in municipalities. These constitute pre-existing conditions in the municipal area which to a large extent dictate spatial form and development patterns because of the restrictions that these elements often place on development. The natural structuring elements include physical barriers such as mountains, ridges, and rivers or natural resources such as conservation areas, mineral deposits, and high potential agricultural land.

Secondly, the spatial development concept looks at the division between urban and rural environments through the application of an **urban development boundary.**

The spatial development concept will subsequently address the **urban and rural environments** in terms of the nodes, networks, and surfaces that apply to those environments.

Finally, the spatial development concept looks at the **movement network** that exists that connects the different elements, and how this should be strengthened to enhance the interaction between the various elements.

The spatial development concept also deals with certain non-spatial issues such as cultural heritage and municipal identity.

The spatial development concept follows an approach of minimalism (i.e. “less is more”). This means that, taking into consideration current growth dynamics, it is better to make a few key development

proposals that will focus development energy to areas where agglomeration advantages can be created and a difference can be made in the spatial structure as opposed to identifying every possible development opportunity and never reaching critical mass with any of those.

It should be borne in mind that the Prince Albert Spatial Development Framework remains a broad strategic planning framework due to the large geographic space that it covers. It cannot therefore make detail proposals for specific areas. For that purpose, Localised Spatial Development Frameworks or precinct plans must be drafted.

7.3.1 Nodes, see Map 48

Nodes are concentrations of urban development located at accessible locations such as modal interchanges and the intersections of public transport routes. These nodes should create areas of agglomeration advantages that are able to attract business and economic developments to these areas. Well-functioning urban nodes are vibrant areas comprising of shopping, work, social and cultural opportunities and public transport facilities in a high quality, safe public environment.

In order to align with the district SDFs the following hierarchy of nodes will be used:

- **High order investment node:** The areas/towns with a population that exceeds 10,000 in order to support high order public investment to serve the entire District and has high development and social need.
- **Primary investment node**: The areas/towns with a population of less than 10,000 serving as rural and agricultural service centres and has high development potential in terms of agriculture and tourism development, and high social need.
- **Secondary investment node:** These are areas/towns of smaller than 5,000 inhabitants which has a high social need and low development potential.
- **Lower order investment node:** These are rural settlements with low development potential which may experience high social need without appropriate and timeous intervention.
- **Neighbourhood nodes:** This type of node occurs at a neighbourhood level and is intended to serve the daily economic and social needs of at least one neighbourhood.
- **Lower Order Neighbourhood nodes:** This is a scaled down Neighbourhood Node and usually occurs at the intersection of Activity Streets and Connectors. Lower Order Neighbourhood Nodes are intended as a public meeting place for communities (i.e. local corner café, church and playgrounds) with only the minimum of activities to satisfy the daily need of the particular community.

The main purpose of these nodes are to act as rural service centres as central places in the rural environment where basic day-to-day services are delivered to the rural communities. The types of services that could be found in these centres include:

- Municipal satellite offices.
- Social and Support Services.
- Small scale (convenience) retail.
- Tourism facilities and services.
- Transportation services.

It is also possible for these centres to have unique characteristics or identities that make them attractive for certain types of development.

7.3.1.1 Future urban development

Having assessed the major activity areas in the municipal urban areas, it is also important to look at the residential settlement areas that lie between these activity areas, and the principles that should apply to the development of those areas.

Residential development, in particular residential development for lower income groups, must focus on social and economic integration and inclusion. Settlement development should form an integral part of the urban areas and no housing development initiatives must be identified outside of these areas.

It is proposed that all future settlement developments that take place in the municipal area shall adhere to the principles of the policy document Breaking New Ground: A Comprehensive Plan for the Development of Sustainable Human Settlement. These include principles such as:

- Residents should live in a safe and secure environment, and have adequate access to economic opportunities, a mix of safe and secure housing and tenure types, reliable and affordable basic services, educational, entertainment and cultural activities, health, welfare and police services.
- Ensure the development of compact, mixed land use, diverse, life-enhancing environments with maximum possibilities for pedestrian movement and public transport via safe and efficient public transport in cases where motorised means of movement is imperative.
- Ensure that low-income housing is provided in close proximity to areas of opportunity.
- Integrate previously excluded groups into urban areas and the benefits it offers, and to ensure the development of more integrated, functional and environmentally sustainable human settlements, towns and cities. The latter includes densification.
- Encourage Social (Medium-Density) Housing.
- Multi-purpose cluster concept will be applied to incorporate the provision of primary municipal facilities, such as parks, playgrounds, sports fields, crèches, community halls, taxi ranks, satellite police stations, municipal clinics and informal trading facilities.
- Enhancing settlement design by including design professionals at planning and project design stages, and developing design guidelines.
- Social housing must be understood to accommodate a range of housing product designs to meet spatial and affordability requirements.

The residential settlement areas in Prince Albert Local Municipality require its own particular interventions over and above the standard principles as set out above. The following indicates the development strategies applicable to them.

It is proposed that development and investment in these service centres should focus on creating sustainable human settlements. The general qualities that must be achieved are:

- The area must be attractive, safe and convenient for people to live in.
- Residents must have access to residential amenities such as local businesses, transport facilities and social and community facilities.
- The area should have a functional local economy.
- The area must be linked to other urban areas through efficient and affordable movements systems to ensure people's access to goods and services outside of the townships.
- Development and investment in these service centres should focus on creating sustainable human settlements.[152]

[152] UN-Habitat defines a sustainable human settlement as one "where all have adequate shelter, a healthy and safe environment, basic services, and productive and freely chosen employment".

7.3.2 Networks

7.3.2.1 Corridors

A development corridor can be defined as "… a linear strip of land or area, connecting large activity nodes, traversing urban or inter-urban areas, surrounding a major transport facility or facilities providing an appropriate regional level of mobility and accessibility to adjacent areas, and containing a high concentration of population and mixed land uses" and "… accommodate major linear transport routes like heavy and light rail and/or freeways, large shopping concentrations etc., social, cultural and sporting facilities as well as a large amount of residential accommodation". [153]

The typical elements of a development corridor are:

- Major movement infrastructure such as a railway line or highway acting as the spine of the corridor;
- Supporting movement infrastructure such as local access roads that will provide access for land uses situated adjacent to the main movement spine (typically the main movement line provides a high level of visibility to land uses while adjacent roads provide access to land uses.)
- The main movement spine should preferably act as a conduit for public transport, with public transport facilities located along the corridor.
- Forces of attraction along the corridor, such as major destination points along the corridor, which creates the development impetus for eventual linear development along the corridor.
- High intensity land uses along the length of the corridor.

What is important to understand is that the corridor need not take the form of a continuous integrated band of activity. At points of highest access along the central spine, development will be more intense and of a higher order while at locations of lower access, lower intensity development or even part of a natural open space network may be found.

Several towns depend on neighbouring municipal areas for public and business services; socio-economic linkages are maintained in the following manner (See **Map 48** below):

- Leeu Gamka and Prince Albert Road maintain socio-economic linkages with Beaufort West;
- Prince Albert maintain socio-economic linkages with George;
- Klaarstroom maintains socio-economic linkages De Rust;

There is therefore significant leakage out of the municipal area; as a result of distance, cost and other factors communities are compelled to leave the municipal area to access health, education, shopping and leisure, and other public services.

The following corridors are identified:

- The N12, N1 and the railway line.
- Ecological corridor

Additionally the SDF identified cases of activity streets, which will be discussed in the following section.

[153] **Andersen and Burnett in National Department of Transport: An Integrated Urban Corridor Assessment and Strategy Development Process**

7.3.2.2 Activity Street

Activity streets can be defined as concentrated development along mobility routes, which are typically also major public transport routes. Development can either take the form of continuous linear development or a series of nodes along the activity street.

Activity Streets play a vital function in linking previously isolated communities at a local level and providing appropriate locations for small and informal enterprises. It strengthens the integration of communities and the accessibility to economic, cultural and social functions.

The network of nodes is reinforced by a system of activity streets, which connect with these nodes. The criteria for identifying the activity streets in Prince Albert Local Municipality were:

- These activity streets must be linked to the major routes in order to support public transport where feasible.
- The activity streets must have a functional relationship with the nodes, typically acting as destinations on the activity streets.

a) The activity streets must have a degree of demonstrated development potential.

The following activity streets are proposed: (See Map 50-57)

- Church Street - Prince Albert
- The main street - Klaarstroom
- Gousblom Street - Bitterwater
- Street in front of the "Leeurivier Supermark" – Leeu Gamka.

Just a few roads are identified as activity streets, for it is important to rather focus development energy to specific areas (principle of minimalism)

It is proposed that the activity streets should be characterised by the following –

- Mixed land uses either directly adjacent to the street or within a distance of 200m from the activity streets.
- The activity streets can be developed as continuous linear development areas or in the "beads-on-a-string" form. The nature of public transport and the length of the route should determine the development pattern. The longer the street the more the development pattern should focus on the beads-on-a-string form. Shorter distances are more conducive to continuous linear development.
- Activity streets should show a large degree of public investment in infrastructure and the public domain.
- Large parking lots adjacent to streets should not be promoted. Buildings should be placed as close to street boundaries as possible to facilitate pedestrian movement and to define and shape the public space.
- Site layouts and building designs of individual developments must take cognisance of and support, public transport and pedestrian movement.
- Activity streets must achieve a balance between promoting access, creating pedestrian friendly environments, and accommodating mobility.

7.3.3 Surfaces

Rural areas are defined as "the sparsely populated areas in which people farm or depend on natural resources, including the villages and small towns that are dispersed through these areas."[154] As shown Map 49 below, the largest part of the municipality comprises of a rural environment. The spatial development framework must therefore focus on how to enhance and support appropriate rural development in the area. The rural environment in Prince Albert Local Municipality is essentially made up of the following five elements:

- Natural Open Spacy System (Includes Critical Biodiversity Areas, Ecological Support Areas and Conservation Areas.
- Agricultural Land.
- Rural service centres and towns.
- Tourism.

The rural environment should be protected from development that is not in line with the rural character of the area. The most important principle that applies is that development should be restricted and that the rural character should be maintained. These areas are typically removed from major nodes or activity areas with little chance of functional integration, which means that any inappropriate development in these areas will contribute to an inefficient spatial form and functionality. Any uses that would normally occur in urban or suburban areas should not be approved outside the urban edge.

With reference to the needs indicated by the rural communities in the IDP, it is clear that the focus in rural areas should be on the upgrading of infrastructure and social facilities. The analysis shows that the rural areas do not show potential for growth over the short or medium term. Their roles as rural residential and agricultural settlements are also unlikely to change.

It is proposed that the following principles apply when evaluating applications for developments outside the identified urban areas:

- Uses should be rural in nature, or should require a rural setting in order to be functional or viable.
- The development should not require extensive service infrastructure.
- The development should not have any negative environmental impact.
- The development should not create possibilities for other developments to establish in the area.
- Uses that primarily service the local market.
- Uses which are resource based.
- Uses which are located at a defined and approved service delivery centre.

It is proposed that the typical land uses that can be permitted in the rural environment include:

- Nature conservation/sensitive natural areas.
- Agricultural activities.[155]
- Tourism and related activities.
- Conference and training facilities.
- Recreational facilities which are essentially rural in nature.
- Farm stalls and home industries.
- Resource based industries.
- Any other uses that in the municipality's discretion fit in with the character of the area outside the urban edge, provided that such development adheres to the criteria set out above.

[154] Source: National Rural Development Framework, 1997
[155] Refer to section on High Potential Agricultural Land for an indication of appropriate and sustainable agricultural development.

It is proposed that the following conditions must apply to development in rural areas:

- Subdivisions of farm portions for exclusive rural residential use or so-called rural/country estates should be considered with great caution. Such development should be located around and contiguous to existing urban areas and strict requirements must be laid down for the provision of engineering services to and within these estates to ensure that it does not lead to environmental problems. Services should be provided according to the standards set by the municipality and **should not bear any service delivery or financial burden for the municipality.**
- Illegal land uses on farm portions, such as industrial and commercial developments that have no direct relation to agriculture, should be eradicated and moved to the urban areas or the rural towns.
- Mining activities in the rural environment may not be permitted within the core and buffer zones of the municipality.

7.3.3.1 Natural Open Space System

Natural open space consists of areas or physical elements that have valuable ecological characteristics and include:

- Mountains and ridges
- Rivers and dams
- Nature reserves and environmentally sensitive areas
- Drainage lines
- Riparian zones

The protection and management of the municipality's natural environment is important for the following reasons:

- The ecological integrity of the natural open space is important in order to maintain natural systems and processes.
- The protection of the natural visual quality of the area increases the attractiveness, liveability, and investment potential of the area.
- The natural open space plays an important role in the social, mental, and physical well-being of residents.
- The natural environment forms the basis for tourism in Prince Albert Local Municipality and it is therefore imperative that the natural environment is conserved to ensure the long term sustainability of the tourism industry in the municipality.

It is proposed that the following principles should apply to the natural open space system:

- The CBA maps will be used as starting point to define the natural open space system.
- The natural open space system should be protected from intrusive, irresponsible and ad hoc developments that damage the ecological integrity as well as visual quality of these areas. These include urban development, mining activities and agriculture.
- A continuous open space system must be developed in the municipality. This means that in certain areas where natural open space is currently affected by activities the municipality must intervene in order to ensure that these ecological corridors can be created and are able to function appropriately.
- Focus should be placed on and resources allocated to those consolidated natural open space areas where long term ecological sustainability can be achieved.
- Development is not supported within the 100 year floodline. In addition, development should be setback from the 100 year floodline. Buffers ranging from 10 to 40 metres are generally applied to

the floodline to ensure protection of habitat outside of the flood zone. Where the drainage system is too small to calculate a floodline, then development must be setback at least 32 metres from the top of the bank of the drainage line. This ensures that the heads of catchments are kept open allowing for more infiltration and less flooding downsteam.

- Any proposed development or redevelopment within the floodplain must be supported by a report by a registered professional engineer to ensure that any new or existing structure can withstand the forces and effects of floodwaters. If building plans are submitted in respect of proposed buildings within the floodplain and such a report has not previously been submitted, it must be included with the building plans.

Although the Spatial Development Framework aims to make development proposals that respect the ecological integrity and environmental sustainability of the area, it has been necessary in certain instances to re-evaluate environmental potential against development potential in order to achieve the truly sustainable development of the area.[156]

7.3.3.2 Agricultural Land

Agricultural land in the municipality should be reserved as prime and be protected from any development or land uses that may have a negative impact on the agricultural potential of the area.

It is proposed that the following activities may typically be permitted in the high potential agricultural area:

Table 52 | Activities permitted in the high potential agricultural area

Activity	***Definition***
Agriculture	*The cultivation of land for crops and plants or the breeding of animals or the operation of a game farm on an extensive basis on natural veld or land.*
Agri-Industry and Agri-Processing	*An enterprise for the processing of agricultural products on a farming unit or within a rural area owing to the nature, and fragility of such agricultural products (e.g. abattoirs, farm pack stores, etc.).*
Rural Housing	*A private settlement situated within an agricultural area and where residence is restricted to bona fide farm workers and their dependents of the farms involved in the development.*
Agri-Tourism	*A type of tourism in which travellers travel to rural areas to experience the activities and lifestyles of people living and working in the agricultural sector.*

[156] "Sustainable development" means the integration of social, economic and environmental factors into planning, implementation and decision making so as to ensure that development serves present and future generations. Source: National Environmental Management Act, 1998

7.3.3.3 Tourism

Linked to the presence of high quality natural environments in the municipality, is rural based tourism. The following tourism sectors are active in the municipality:

- Heritage tourism
- Eco-tourism
- Agricultural tourism

Two very important principles, which the tourism development areas must adhere to, are quality and accessibility. Quality refers to aspects such as environmental management, availability of essential engineering services infrastructure, land use management, development control and architectural standards. Accessibility refers to the availability of and quality of movement infrastructure such as roads and rail as well as the availability of transport services in the area.

From an accessibility, service delivery and identity-building point of view, it is more preferable to cluster tourism facilities along and around certain routes and nodes. For this purpose, a tourism nodes have been identified which should be the focus area for the development of tourism related infrastructure:

The proposed tourism node is:

- Prince Albert

The R328 via the Swartberg pass or the R407 is considered the main gateways into the rural tourism area, and as such should be afforded specific attention insofar as directional signage, environmental quality and the quality of any potential developments are concerned.

Proposed tourism facilities and services, which may be permitted in the tourism focus areas, include:

- Guest Houses and lodges.
- Cultural Villages.
- Environmental education centres.
- Restaurants, tea gardens.
- Wellness centre/spa.
- Infrastructure that serves the tourism facilities.

Prince Albert already consists of most of these facilities and services. It is however suggested that the current state of tourism in Prince Albert be consolidated and maintained.

7.3.3.4 Rural Housing Development

The sustainable development of rural housing in the municipality and the sustainable delivery of such housing should be prioritized. However, the danger of accommodating housing developments in rural environments without thorough consideration is that islands of poverty are created which have no potential for future economic development or intensive provision of social and community facilities.

It is proposed that to ensure that residents of rural settlements are not just housed in any rural location, which is devoid of services, facilities and economic opportunities, certain principles should apply that must inform the development of rural housing. These are:

- Rural housing should be developed as close as possible to existing rural service centres, or, more ideally, as close as possible to urban areas in Prince Albert Local Municipality.
- Rural housing should focus on providing housing to people who are connected to the rural economy.
- Rural housing development should focus on particular locations in the rural environment where consolidated settlements can be developed. By focusing housing developments in particular locations in the rural environment, it will become possible to develop more sustainable settlements with all basic social services and facilities, rather than having small scattered housing settlements across the rural environment where it is not feasible to provide services and facilities to each of those settlements.

7.3.4 Spatial Planning Tools

7.3.4.1 Urban edge

One of the major issues that affects the future development and spatial structure of the municipality is urban growth management. National and provincial policy directives demand of local authorities to compact urban areas and prevent continuous outward urban sprawl.

The urban edge is defined as an institutional boundary within the municipality with the sole purpose of containing physical development and sprawl and re-directing growth towards a more integrated, compact and efficient urban form. The urban edge is also demarcated to protect valuable natural environments and resources.

Policy and standard application guidelines exist in respect of the rezoning of agricultural land. The key objective of these guidelines and policy is to prevent fragmentation of high potential agricultural land. This is also a fundamental objective of bioregional planning, which recognizes that the protection and appropriate management of high potential agricultural land are imperative for sustainable development.

The rezoning of agricultural land is generally based on the principle of sustainable agriculture. This principle is based on the sustainable development equation and the concept of carrying capacity. Each agricultural unit must, in terms of existing policy, be a viable economic agricultural unit.

For government to consider non-agricultural development to be undertaken Agricultural land, applicants have to provide assurance that such development would not fragment high potential agricultural land and that it would significantly support the over-arching objective of environmental sustainability. The proposed development must, therefore, imply a direct, or indirect, positive impact on, for example, regional tourism, agriculture, environmental conservation and the interests of previously disadvantaged people.

Peripheral locations are faced with continuous outward development pressures and are typically seen as the perpetrators of sprawl. The delineation of an urban edge for Prince Albert, Leeu Gamka, Klaarstroom and Prince Albert Road is vital for achieving an efficient and sustainable municipality through:

- Containment of urban sprawl;
- Intensification of development;
- Integration of urban areas;
- Protection of valuable agricultural, natural and cultural resources;
- The optimum use of existing resources in established urban areas, such as bulk service infrastructure, roads and public facilities, and
- Reducing the need for commuting as well as commuting distances.

The delineation of the urban edge for the purpose of the Prince Albert Spatial Development Framework takes a long term, strategic approach, looking at potential future pressure areas, municipal growth directions, population projections and strategic value of certain locations. The value of having a long term urban development boundary for the municipality is that:

- It enables long term, focused planning for infrastructure and services delivery;
- It provides certainty in the market, and
- It enables integrated, pro-active long term spatial planning which can direct and manage growth and development.

It is proposed that based on the urban edge as demarcated in Prince Albert, Leeu Gamka, Klaarstroom and Prince Albert Road, the municipality should not entertain ad hoc, short term proposals for the amendment of the urban edge, unless a strategic change has taken place in the municipal and provincial context.

7.3.4.2 Infill and densification

Densification is not an end in itself, but a means to achieve more efficient utilisation of transport, the creation of the necessary population thresholds to support community and business facilities and to prevent low density outward expansion and development on land, which is valuable from an ecological or agricultural perspective. In the case of pedestrian orientated communities like in Prince Albert Local Municipality, densification helps with improving access to key facilities and amenities in the town.

It is proposed that:

- Higher density development should be focused around and within walking distance from major activity areas and transport services.
- Densities should decrease as the distance away from major activity areas increases. Higher densities in the wrong locations or which are removed from major activity areas and transport routes can be harmful to urban efficiency and sustainability.
- Densification should capitalise on existing available infrastructure.

Aspects that may influence the level of densification in a particular local context include:

- Availability of infrastructure and services which can support higher density residential development.
- Heritage aspects.
- Socio-economic characteristics.
- Topography.

The general guidelines for densification can be summarised as follows:

- Promote average gross residential density of 25du/ha in urban settlements dependent on public transport.
- Promote average gross residential density of 15du/ha in small rural villages not dependent on public transport.
- Densities should increase toward major access routes and strategic centres or cross roads as follows:
  - Lower residential densities >1du/ha – 15du/ha alongside toward urban edge.
  - Medium residential densities >15du/ha – 50du/ha within 1km of major transport route.
  - Activity / development spines/streets can be promoted along mobility routes if ―offset and parallel to (service roads) or, ―perpendicular and linking to activity streets (access routes) are provided.

Table 53 | Density considerations

Residential density factor		Plot size (assume 60% of urban land for net residential use)	Appropriate location	Configuration/zoning	Comment
1	1du/ha – 5du/ha	1ha-1200m^2	Abutting and up to 2km outside the Urban Edge	Agricultural Single Dwelling	There should be a gradual transition to countryside NOTE: in some cases e.g. CBD abutting Urban Edge and “Urban wall” may be appropriate
2	5-30du/ha	1200-300m^2	“suburbs”	Single dwelling SPC: F.1.f.i Res1: low density residential	Areas not abutting public transport route nor CBD’s / nodes where residents wish to enjoy low density lifestyle Outside of 1km walking distance
3a	30-60du/ha	250-80m^2		“Town houses” (group housing - can be Single Dwelling) SPC: F.1.f.ii Res 2: high density residential	Within walking distance of main routes.
3b	30-60du/ha	250-80m^2		“BNG” / GAP housing (can be Single Dwellings, Group Housing, General Residential SPC: F.1.f.vi Res 2: high density residential	Conforms to BNG policies – should be located close to public transport corridors and areas of urban opportunity – high densities less suitable in rural settlements.

7.3.4.3 Means of achieving densification

Densification can take place in the developed areas of Prince Albert, Prince Albert Road, Klaarstroom and Leeu Gamka and with consideration on vacant infill sites within the developed areas and on green field sites that are within the town’s planned growth direction which should be accommodated within the urban edge. The general process of densification takes place in a number of ways and is supported by a range of zoning and land use regulations.

Means or ways of achieving densification include:

- Additional dwelling units
- Construction of attached/detached second dwellings including the changing of non-residential buildings, or parts of buildings, to residential buildings (e.g. garages).
- Subdivisions
- Subdivision of land and redevelopment at higher densities.
- Consolidation and redevelopment
- Block consolidation of erven with redevelopment at higher densities.
- Consolidation with redevelopment at higher densities including the demolition and integration of existing structures.
- Increased land use rights
- Increasing the existing bulk rights through the extension of the building or adding one of floors to accommodate an increased number of units.
- Higher density infill on underutilised land
- Higher density infill on vacant and underutilised land throughout the built area of the City.
- Large scale precinct development
- Consolidation of sites within a street block to create a single larger parcel for redevelopment into multi-storey units.

It is proposed that in order to achieve densification in Prince Albert Local Municipality, the focus should be on:

- Higher density infill development on vacant and underutilised land.

This is applicable to Prince Albert, Leeu Gamka, Klaarstroom and Prince Albert Road. Taking into account the current growth patterns and the current availability of vacant stand, this should be the priority of the municipality in terms of new development and densification.

7.3.4.4 Smart Growth

Internationally, a sustainable approach to growth management aptly called “smart growth” is seen as the most efficient way of developing urban areas. Smart Growth is a collection of urban development strategies aimed at reducing sprawl and promoting growth that is balanced and fiscally, environmentally and socially responsible. Smart Growth tries to promote growth and development in areas with optimal opportunity, and offers an antidote to the sprawl that has resulted from unlimited low-density development further and further away from the urban centres. Rather than simply restricting development, smart growth is focused on how and where new development should be accommodated.

The principles of smart growth are:

- New growth and development must be leveraged to improve existing areas of opportunity.
- Redevelopment of existing areas must be promoted rather than abandoning existing infrastructure and facilities only to rebuild it farther out.
- Development must be “town-centre”, public transport and pedestrian oriented.
- Integrated, mixed-land uses must be promoted in strategic locations.

The urban edge is not an isolated management tool, but rather part of a package of urban growth management tools that all need to be employed equally vigorously by the local authority in order to achieve desired, sustainable and efficient urban growth management.

It is proposed that, in order to support the successful implementation of the urban edge, the municipality must focus on applying the following strategies:

- **Management Zones along the urban edge.** Well-functioning urban environments are structured around zones of diminishing intensity as it moves away from areas of highest opportunity. Typically the fringe of urban areas are characterised by what is termed the urban-rural transition zone, comprising low density urban development, low intensity, extensive land uses and semi-rural activities such as nurseries. The urban edge should therefore not denote a clear divide between urban and rural, but rather include management zones along the edge that makes provision for a gradual transition from an urban to a rural environment.
- **Promoting Infill development** refers to the identification of vacant land parcels within the demarcated urban areas, amongst existing developments, and developing these parcels of land according to their optimal development potential levels.
- **Promoting Densification in and around strategic locations** is an important antidote to urban sprawl as it looks at providing high numbers of housing units in strategic, highly accessible locations with high levels of access to economic and social opportunities. If the housing demand, or part thereof, can be satisfied through centrally located high quality higher density residential development then there will be less demand for low density residential developments on the periphery. The secret to success for stimulating the demand for higher density residential living is the quality of the urban environment in which these developments are located. These areas should therefore be focus areas for public investment in infrastructure, social services, streetscape and urban design, open spaces and general high quality, positive performing urban environments.
- **Managed expansion** refers to the gradual and incremental outward growth of a settlement (i.e. the so-called ripple effect), but within demarcated urban development boundaries (or urban edge), as opposed to leap frog developments that are not physically and functionally integrated with the main urban area.

7.3.4.5 Town Image and Public Spaces

Town image and the quality of public spaces relate to the convenience, safety, security and enjoyment to residents and visitors' experience of the municipal area. To achieve a positive town image with positive performing urban environments, the local authority must focus on urban management together with land use management.

It is proposed that the following aspects receive attention:

- Entrances into the urban areas of Prince Albert Local Municipality should be celebrated through signage, monuments or other prominent features.
- Strategic sites, which provide settings for landmarks, should be identified and utilised. Buildings located at these positions should have landmark qualities.
- Important views and vistas should not be obstructed by development.
- Public urban spaces should be well designed in terms of their function and the role they play within the urban structure and community life.
- Any development should make a positive contribution to the public environment, whether it is an urban or rural setting.
- Main roads should be developed as important public space elements and treated as such with the planting of trees, maintenance of sidewalks and the provision of well designed, coordinated street furniture such as dustbins, bollards, benches, bus shelters etc.

7.3.4.6 Cultural heritage

Although cultural heritage is not necessarily always spatial in nature, or are not necessarily always on the same scale as other components of the spatial development concept, it is necessary to address it as part of the spatial development proposals. It forms an important part of the spatial environment and development proposals can have a harmful impact on the area's cultural heritage.

South African National Heritage Legislation makes provision for the protection of all natural and man-made heritage objects and intangible heritage. This includes rare phenomena like interesting rock formations, mountains, vistas, trees, bio-spheres, buildings, ruins, roads, animal or man-made tracks, fields, drifts, dams and furrows, graves, artwork, marked or unmarked places of worship or other religious or cultural uses etc. It also includes intangible heritage like folklore, folk art, folk dances, traditions, written and aural history, place names etc.

Some important cultural and heritage attractions in the municipality include:

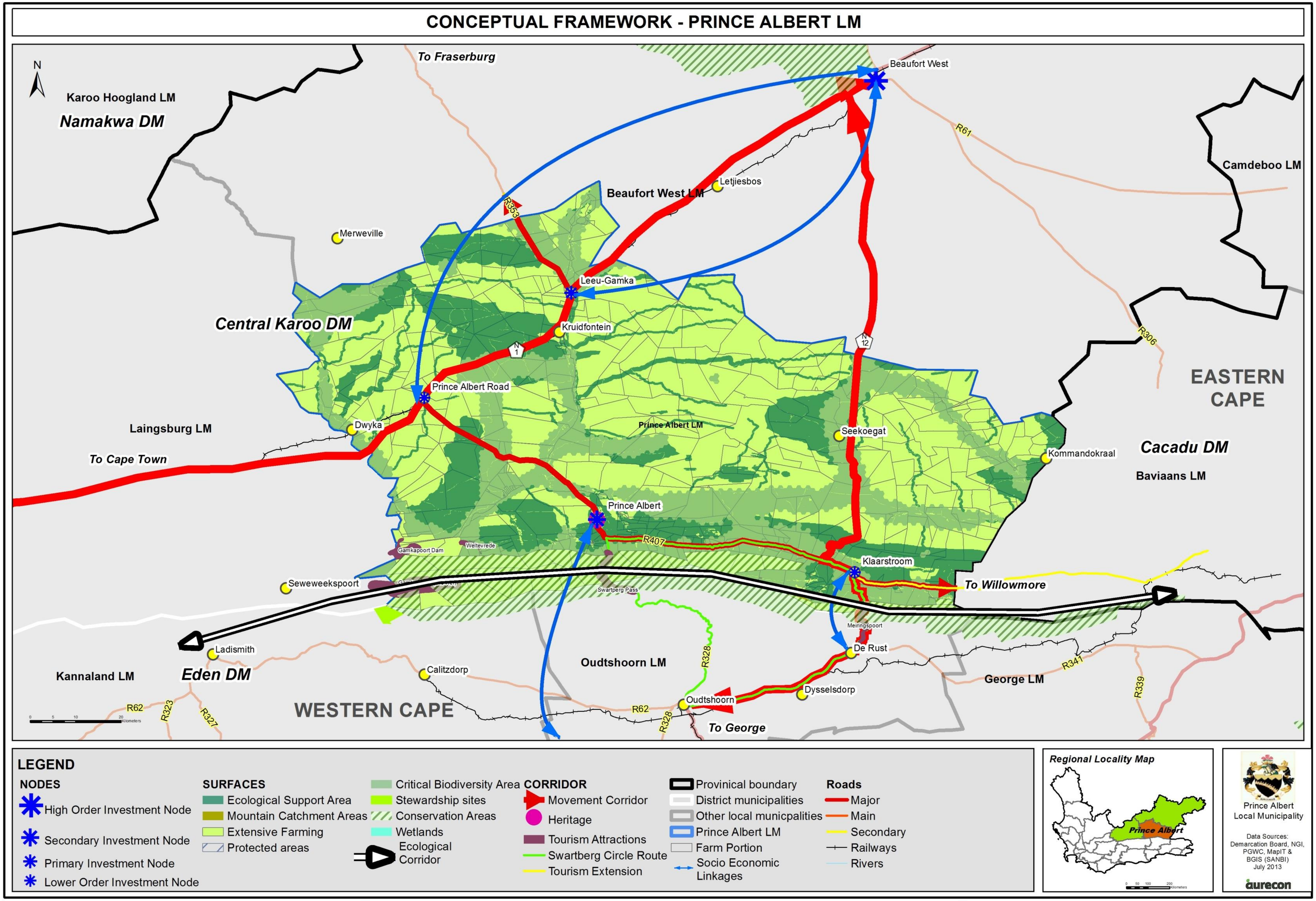
- Gabled buildings (c1840-1860)
- Historical plantings many of which are older than 125 years
- 13 proclaimed monuments in Prince Albert.

In general, South African National Heritage Legislation stipulates that anything older than 60 years is regarded as of potential heritage value and may therefore not be destroyed or altered without written permission by the South African National Heritage Council. Even younger objects that the general public and/or the South African National Heritage Council may regard as of heritage value can be declared as Heritage Site/Objects with the same protection.

It is proposed that the following principles apply to developments with a possible impact on cultural heritage:

- All new developments should therefore consider heritage resources as part of the environmental impact assessment process.
- All developments that affect existing structures older than 60 years or those that have been afforded protected status must adhere to the provisions of the relevant legislation.
- All gateways should be maintained as significant features. Signage along routes in the vicinity of gateways must be avoided.
- Major landmarks should be conserved.
- Historical sites such as cemeteries should be well maintained.

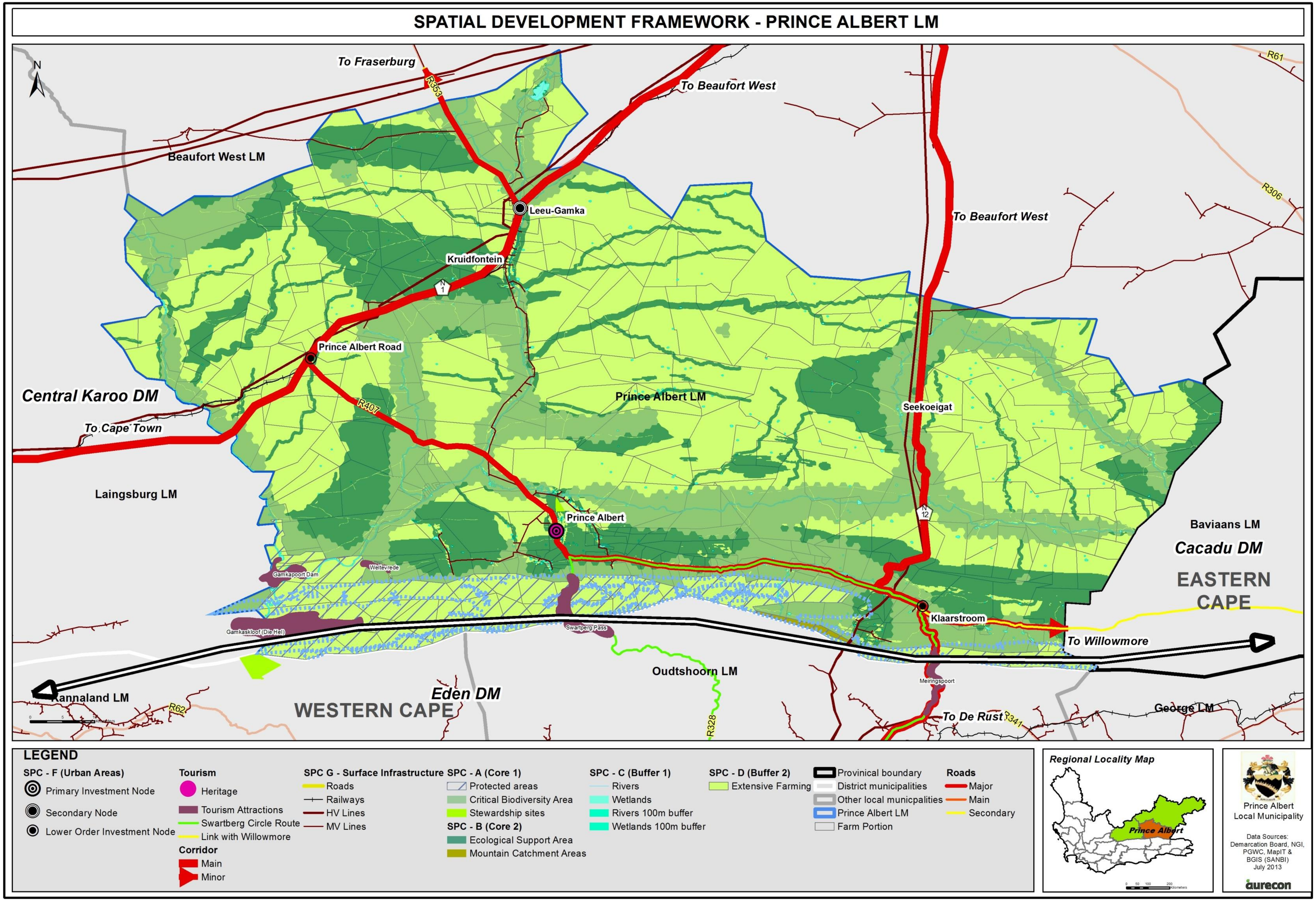
The conceptual framework brings together the development concept of movement, networks, nodes, hierarchies and surfaces as described above. **Map 48** below shows how the broad development concepts are applied in Prince Albert Local Municipality.



Map 48 | Conceptual Framework – Prince Albert Local Municipality

7.4 Spatial Development Framework Proposals

The "Spatial Planning Categories" (SPC) are geographically displayed and the spatial tools and concepts are applied to Prince Albert Local Municipality. See **Map 49** below.



Map 49 | Spatial Development Framework – Prince Albert Local Municipality

7.5 Prince Albert

7.5.1 Prince Albert: Spatial Analysis, see Map 50

Locality

- 172km from George, 392 km from Cape Town, 1066 km from Johannesburg.
- Prince Albert is included in the Swartberg circle route (**Figure 73),** and located:
  - 70.5 km from Oudtshoorn;
  - 52.6 km from Klaarstroom; and
  - 76.3km from De Rust.

Figure 73 | Swartberg Circle Route[157]



Urban Quality

- The entrance from the R407 (north) enjoys the dramatic backdrop of the Swartberg Mountain. However more can be done to enhance the first impression.
- The entrance from the R407 (south) lacks a sense of arrival.
- Church Street (Main Street) is characterized by its boulevard of trees and significant buildings and street frontages.
- Prince Albert town is characterized by various national monuments, a water furrow system, significant heritage farmhouses on prime farmlands, serial grouping of Victorian and Edwardian dwellings and a strong urban-agriculture link.
- The Robert Gordon Koppie provides a botanical backdrop to the town.
- Maintenance of internal roads and sidewalks is required.
- North End neighbourhood presents a completely different urban quality. Buildings are generally single RDP type housing and there are far fewer trees.

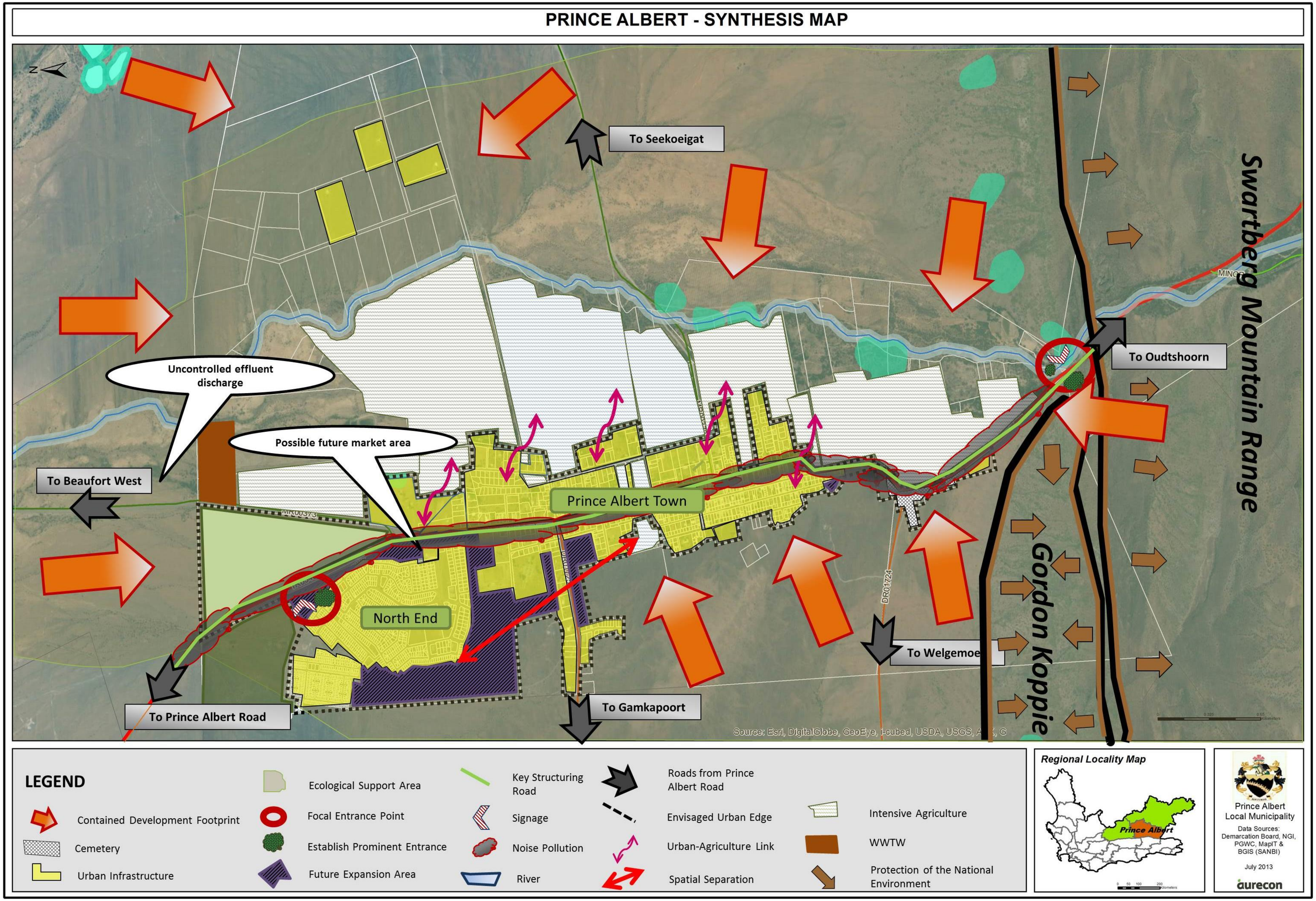
Figure 74 | Street Frontage



Spatial Integration

- The current spatial form still strongly reflects the history of the town and past patterns of development. The linear structure of the town is entirely determined by the highest contour along which water can be gravity fed to the lower lying erven and floodplain.
- The North End neighbourhood is currently spatially separated from Prince Albert town.
- It is proposed that the development footprint be contained as far as possible

[157] INFO SOUTH AFRICA. Swartberg Circle Route. http://www.oudtshoorninfo.com/attractions.php?id=421. Date of Access: 28 November 2013



Map 50 | Prince Albert - Synthesis Map

7.5.2 Prince Albert: Spatial Development Framework, see Map 51

Prince Albert is the administrative/tourism capital of the municipality and draws most of the people and business to it and should therefore be the first priority for public investment purposes.

Core landscape areas

- Celebrate the two main entrances of Prince Albert through landscaping and signage which portrays the unique sense of place of Prince Albert and creates a welcoming and tourist-friendly entrance to the town.
- Church Street is the principle cultural, heritage and structuring element of the town, and therefore it must be conserved and enhanced
- The activity street should retain its heavily treed character which forms a strong part of its sense of place. Additional beatification of Church Street is proposed by landscaping and the upgrading of the sidewalks.
- Due to the high number of disabled population situated within Prince Albert Local Municipality it is proposed that the disabled population be accommodated when upgrading takes place A frontage Urban Design Control Area is proposed along Church Street so as to ensure that a high standard of building appearance is achieved so as to ensure a good impression is made to traffic along this street which acts as the settlement "front window".
- An area towards the north eastern side of North End is identified for the development of a food garden.

Figure 75 | Current Prince Albert Entrance



Figure 76 | Church Street Sidewalk



- The open space areas within Prince Albert should be well maintained.
- It is proposed that the conservation status of Gordon Koppie be formalized to a Protected Area.
- The Prince Albert historical cemetery should obtain national protection, as proposed in the Draft Central Karoo District SDF dated 2013.

Urban Development

- ± 41 hectare is reserved for future residential development which is in accordance with the household growth projections calculated under section 6.3.2.3. The future residential development areas are prioritized as follows: (see **Map 51** below)
  - Priority Area 1: Infill development
  - Priority Area 2: Ideal for future BNG and GAP housing to bridge the spatial divide between Prince Albert town and North End.
  - Priority Area 3 & 4: Ideal for GAP housing.
- The density of new developments within Prince Albert can be as high as 25du/ha and higher. (In line with the Western Cape SDF.)
- Proof of suitable and adequate water resources should be in place and the depletion of the resource should be taken into account before permitting any new developments.
- The layouts and building designs of new developments within the delineated heritage area should complement the existing 'Karoo Style' architecture, patterns and building qualities. The heritage rich area must be developed in such a manner that the heritage elements remain a living element within the modern economic society.
- Business and civic uses should be accommodated along the identified activity street and focussed towards the identified Lower Order Neighbourhood Node.
- The area adjacent to the R407 is well positioned to be developed into a market area. (See the earmarked area on **Map 51.) Figure 77** shows an entrepreneur selling his product on the sidewalk.
- The extensive agricultural areas should be retained as a key economic resource for agriculture. It is however necessary in certain cases to re-evaluate the agricultural potential of the economic resource against the development potential thereof in order to achieve the truly sustainable development of the area.

Figure 77 | Local Entrepreneur



- The subdivision of the historic agricultural farms is thus not preferred and should not be permitted unless well motivated. The following policy should apply to the subdivision of agricultural land within the urban edge:
  - A motivation report should be submitted and should include the following:
    - Describe the ecological importance of the land, the heritage implications, the land capability and the water availability;
    - Include a business plan; and
    - Include a description of the purpose of the application and the sustainability thereof.
    - A description of the access point and available services.
  - The motivation report should also be approved by the Provincial and National Department of Agriculture in terms of Act 70 of 1970.

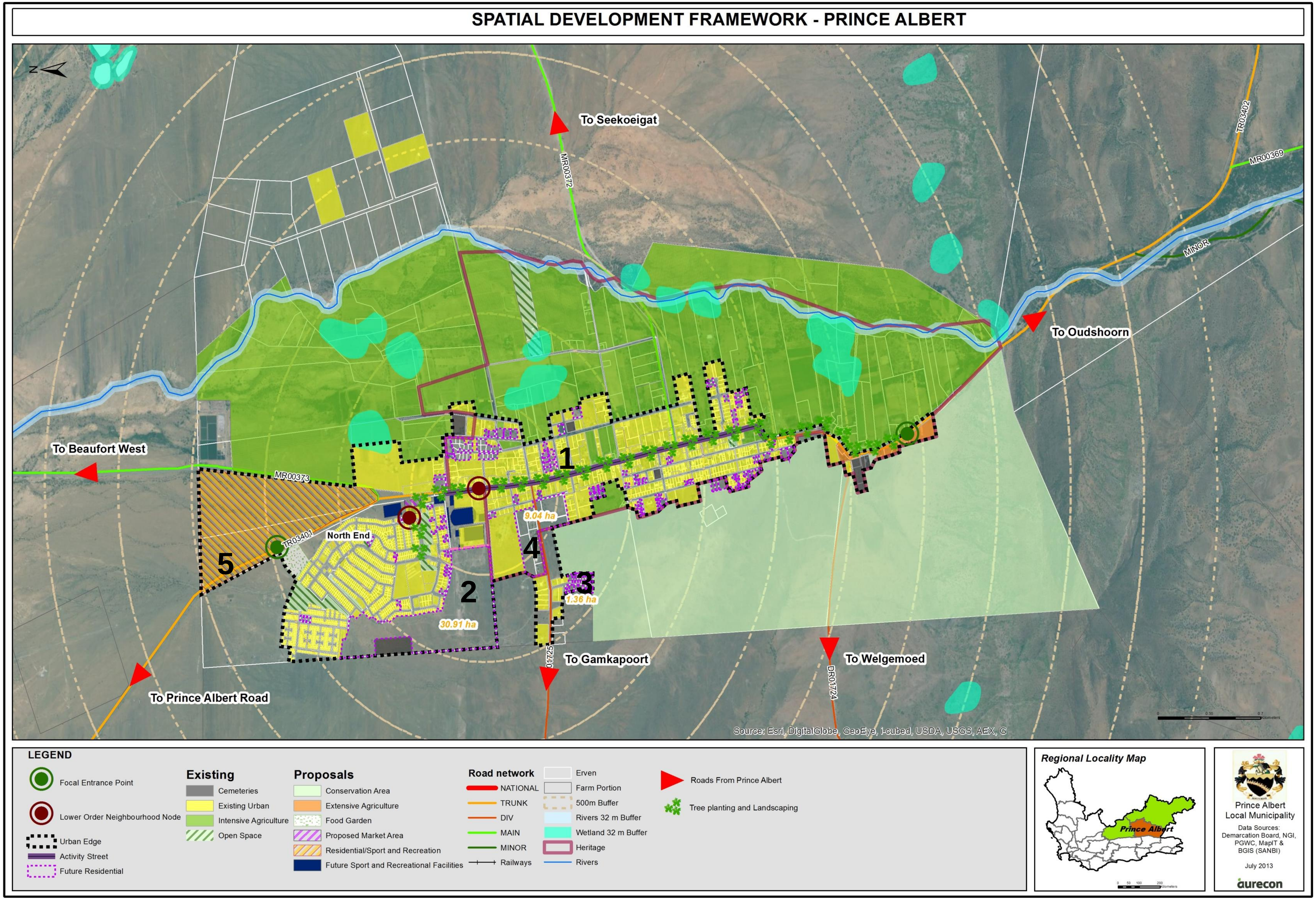
- The “town” farms make a considerable contribution to the character of Prince Albert. However these farms are under increasing pressure for development. It is therefore proposed that a Land Use Management Policy be developed for the Prince Albert town farms.
- The 1:50 year flood line should be determined and development should not be permitted within the floodline. Where the drainage system is too small to calculate a floodline, development must be setback at least 32 metres as set out in the NEMA regulations. This ensures that the heads of catchments are kept open allowing for more infiltration and less flooding downstream.
- Future development within the urban edge should not put pressure on municipal engineering services or harm the historical character of Prince Albert.

Urban Restructuring

- Future developments should be strategically located in order to promote the integration of North End neighbourhood and the historical town.
- The following is proposed in order to bridge the spatial divide:
  - Future residential development (see priority 1 on **Map 51** below)
  - Development of sport and recreational facilities. (see **Figure 78** below)
  - Extension of Mecuur street. (see **Figure 78** below)
- The urban edge was delineated in order to:
  - Promote infill development;
  - To protect valuable agricultural land and
  - To protect the conservation area (Gordon Koppie) towards the western side of Prince Albert

Figure 78 | Proposed Sport and Recreational Facilities Development





Map 51 | Prince Albert SDF Map – Prince Albert

7.6 Leeu Gamka

7.6.1 Leeu Gamka: Spatial Analysis, see Map 52 below

Locality

- Leeu Gamka is situated on the N1 and is located:
  - 77.4km from Beaufort West;
  - 125km from Laingsburg; and
  - 389km from Cape Town; and
  - 1013km from Johannesburg.

Urban Quality

- The Leeu Gamka town entrance from the N1, the Leeu Gamka entrance via train and the Bitterwater entrance from the R353 lack a sense of arrival. Much can be done to enhance the first impression.
- The railway system and the national road which passes through Leeu Gamka causes noise pollution.
- Bitterwater consist out of RDP type housing and very few trees. The main road is tarred and the rest of the internal roads are gravel.

Figure 79 | Bitterwater Entrance

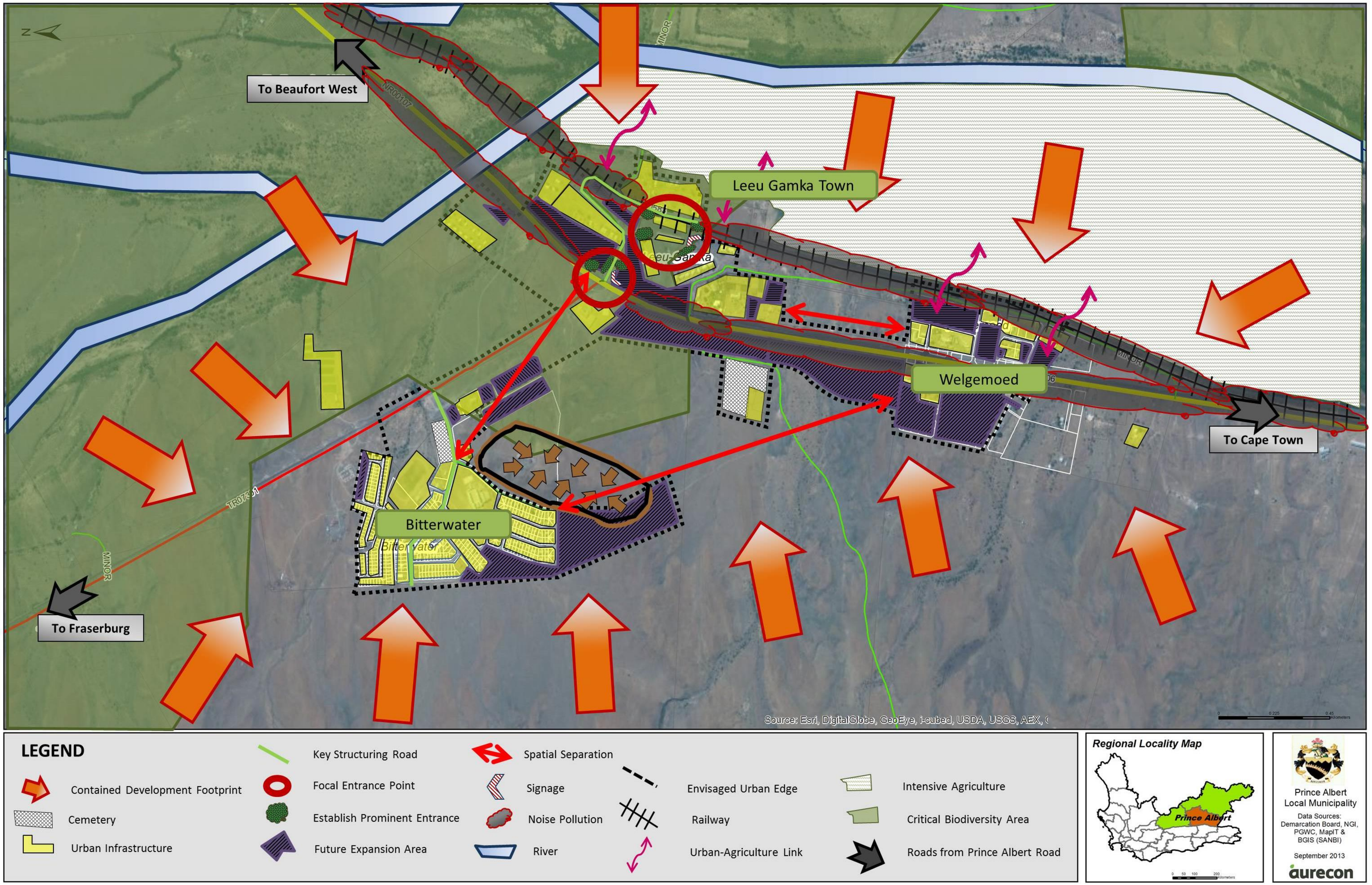


- Leeu Gamka consists out of a railway station and railway housing.
- Both Leeu Gamka and Welgemoed lack a proper internal road system.
- A portion of Leeu Gamka and Bitterwater is located on a Critical biodiversity Area.

Spatial Integration

- Leeu Gamka consists out of three areas which are spatially removed from each other, namely Leeu Gamka, Bitterwater & Welgemoed.
- Welgemoed is a historic subdivision adjacent to the N1, Leeu Gamka a historic railway town and Bitterwater is situated 2km north of Leeu Gamka adjacent to the road leading to Fraserburg.
- The national road that runs through Leeu Gamka and the topography makes it difficult to spatially integrate Bitterwater with Leeu Gamka town and Welgemoed.
- It is proposed that the development footprint be contained as far as possible

LEEU-GAMKA - SYNTHESIS MAP



Map 53 | Leeu Gamka - Synthesis Map

7.6.2 Leeu Gamka: Spatial Development Framework, see Map 54

Core landscape areas

- Celebrate the entrances of Leeu Gamka through landscaping and signage in order to capitalize on the economic opportunity of being situated adjacent to the N1.
- Create a focal entrance point at the railway station though esthetical upgrading which includes architecture and landscaping.
- Tree planting in Gousblom Street and Landscaping at the railway station.

Urban Development

- ± 16 hectare is reserved for future residential development which is in accordance with the household growth projections calculated under section 6.3.2.3. The future residential development areas are prioritized as follows: (see **Map 54** below)
  - Priority Area 1 & 2: Ideal for GAP housing.
  - Priority Area 3 & 4: Ideal for future BNG housing.
  - Priority Area 5: Ideal for BNG housing to bridge the spatial divide, between Bitterwater and Welgemoed/Leeu Gamka town.
- The density of new developments within can be as high as 25du/ha and higher. (In line with the Western Cape SDF.)
- Business and commercial activities should be accommodated along the activity spine and focused towards the identified lower order neighbourhood nodes. Extensive development on both sides of the N1 should be discouraged as this could result in traffic-related dangers (i.e. people crossing the busy N1 highway).

Figure 80 | Lower order neighbourhood node

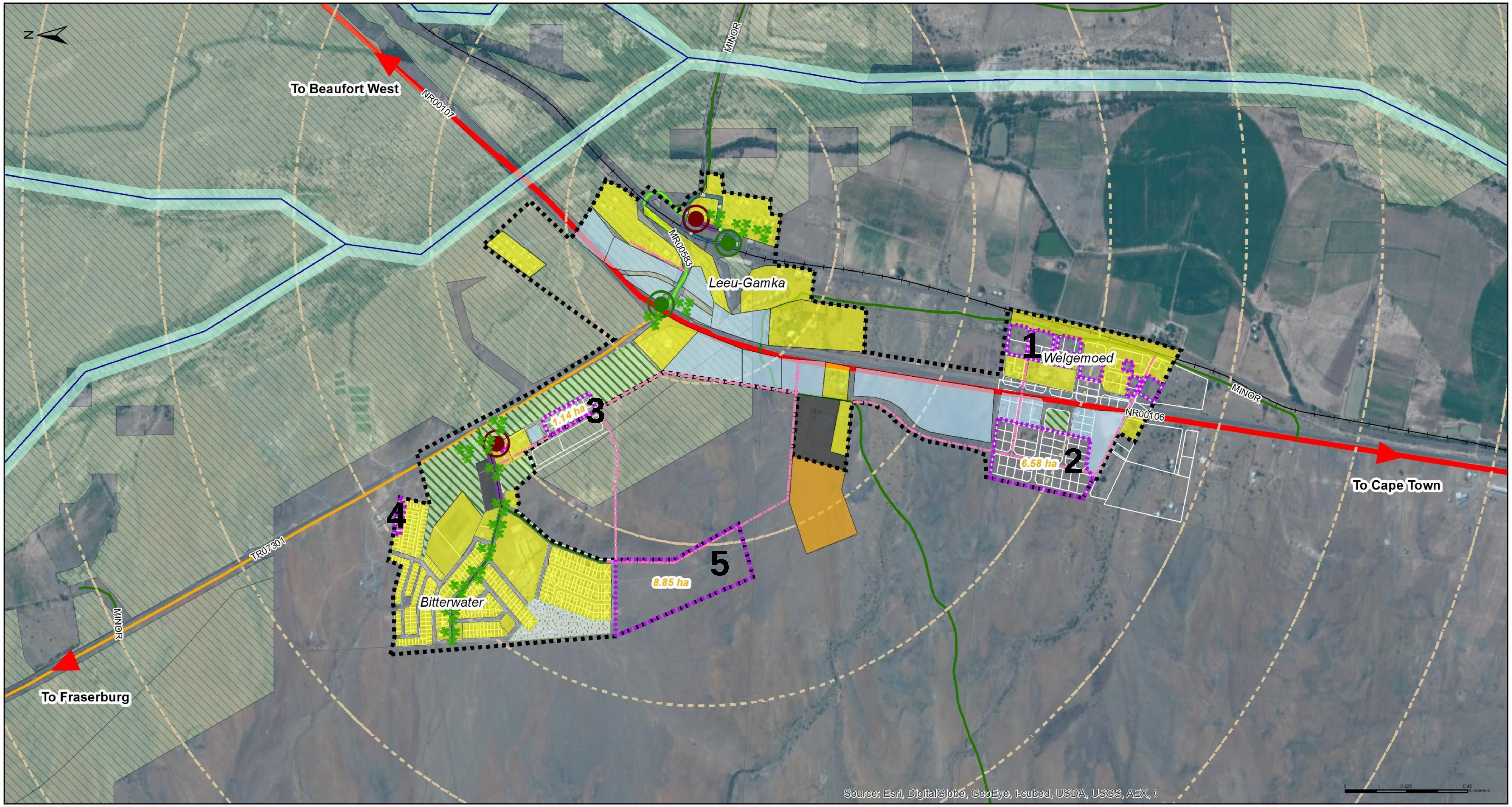


- The 1:50 year flood line should be determined and development should not be permitted within the floodline. Where the drainage system is too small to calculate a floodline, development must be setback at least 32 metres as set out in the NEMA regulations. This ensures that the heads of catchments are kept open allowing for more infiltration and less flooding downstream.
- The areas adjacent to the N1 highway which are earmarked for light business should be reserved for commercial, industrial and transport related developments.
- Future development on the Critical Biodiversity Area should be avoided as far as possible. However due to the topography and the projected household growth some of the identified future residential areas includes portions of the Critical Biodiversity Areas.

Urban Restructuring

- Spatial Integration of Bitterwater, Leeu Gamka and the Welgemoed area needs to be promoted as far as possible. The areas are spatially isolated and pose a dysfunctional spatial pattern. It is proposed that integration takes place from Bitterwater towards Leeu Gamka in the manner that land is made available for low cost housing.
- The development of area 6 and 8 and the proposed network will promote the spatial integration.
- The identified urban edge will keep development close to opportunities and will not put unnecessary pressure on current infrastructure.

SPATIAL DEVELOPMENT FRAMEWORK - LEEU-GAMKA



LEGEND

Lower Order Neighbourhood Node
Focal Entrance Point
Future Residential
Urban Edge
Activity street

Existing
Existing Urban
Open Space
Cemetery

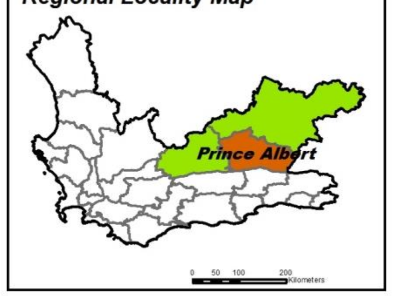
Proposals
Tourism Development
Future Business Development
Landing Strip
Food Garden and Small scale farming

Road network
NATIONAL
TRUNK
DIV
MAIN
MINOR
Proposed Roads
Railways

Erven
Farm Portion
Ecological Corridor
Critical Biodiversity Area
500m Buffer
Rivers

Roads From Leeu-Gamka
Tree planting and Landscaping

Regional Locality Map



Prince Albert Local Municipality

Data Sources: Demarcation Board, NGI, PGWC, MapIT & BGIS (SANBI)

September 2013

aurecon

7.7 Klaarstroom

7.7.1 Klaarstroom: Spatial Analysis, see Map 55 below

Locality

- 119km from George, 445 km from Cape Town, 1059 km from Johannesburg.
- Klaarstroom is included in the Swartberg circle route (**Figure 73**), and located:
  - 60 km from Oudtshoorn;
  - 52.6 km from Prince Albert; and
  - 25km from De Rust.

Urban Quality

- Both of the Klaarstroom entrances enjoys the dramatic backdrop of the Swartberg Mountain. However more can be done to enhance the first impression.

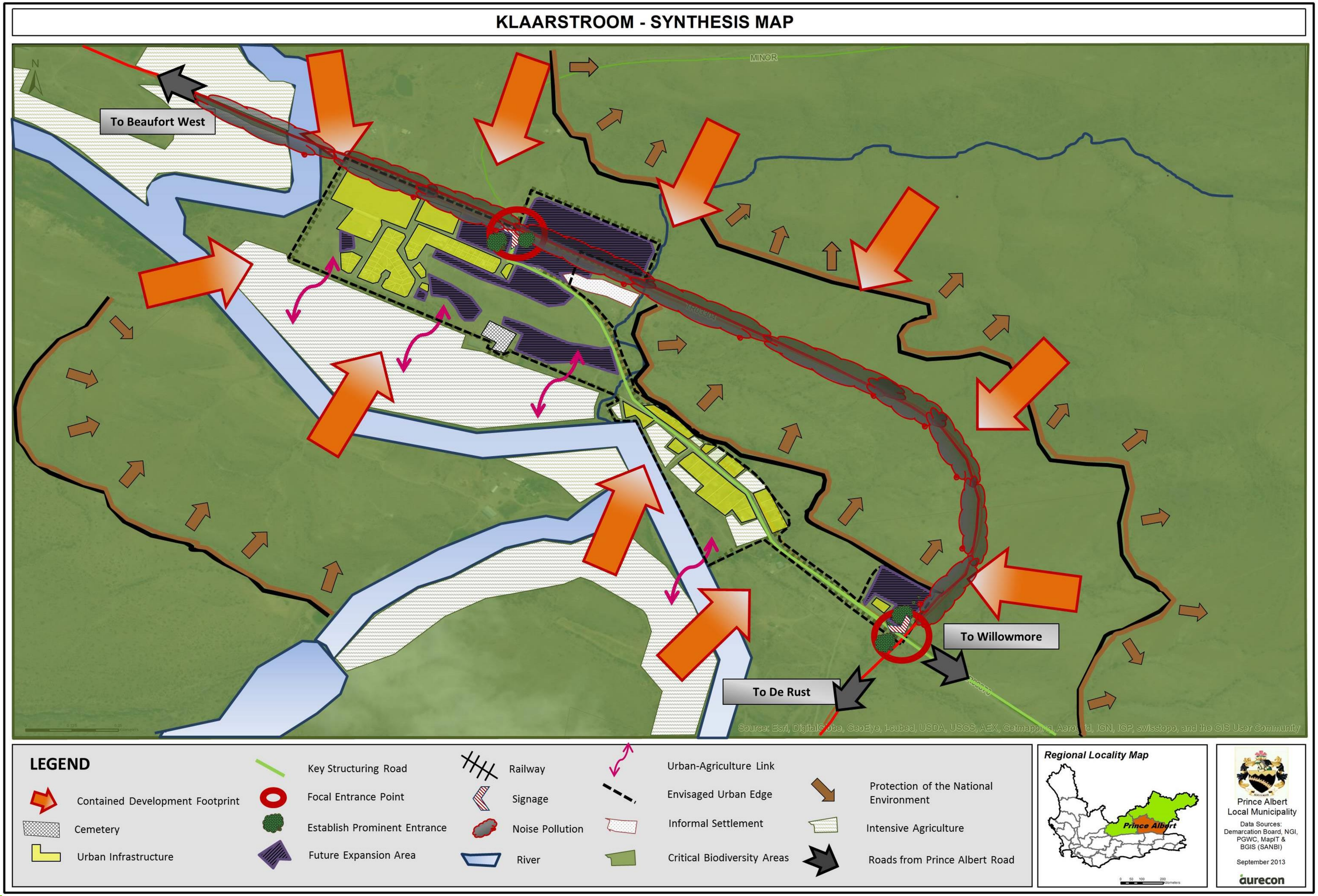
Figure 81 | Klaarstroom Entrance



- The main structuring element of Klaarstroom is the R407 (main road) that runs through Klaarstroom.
- Klaarstroom north consist out of RDP housing and south out of private sector housing.
- Klaarstroom lack trees and landscaping.
- Klaarstoom as a whole is situated on a Critical Biodiversity Area.

Spatial Integration

- Klaarstroom north and south is spatially separated from each other.



Map 55 | Klaarstroom - Synthesis Map

7.7.2 Klaarstroom: Spatial Development Framework, see Map 56

Core landscape areas

- Celebrate the three main entrances of Klaarstoom through landscaping and signage which portrays the unique sense of place of Klaarstroom.
- Tree planting and landscaping of the main structuring element of Klaarstroom.
- Should promote an extension of the tourism route towards Willowmore and Meiringspoort as a tourism destination.

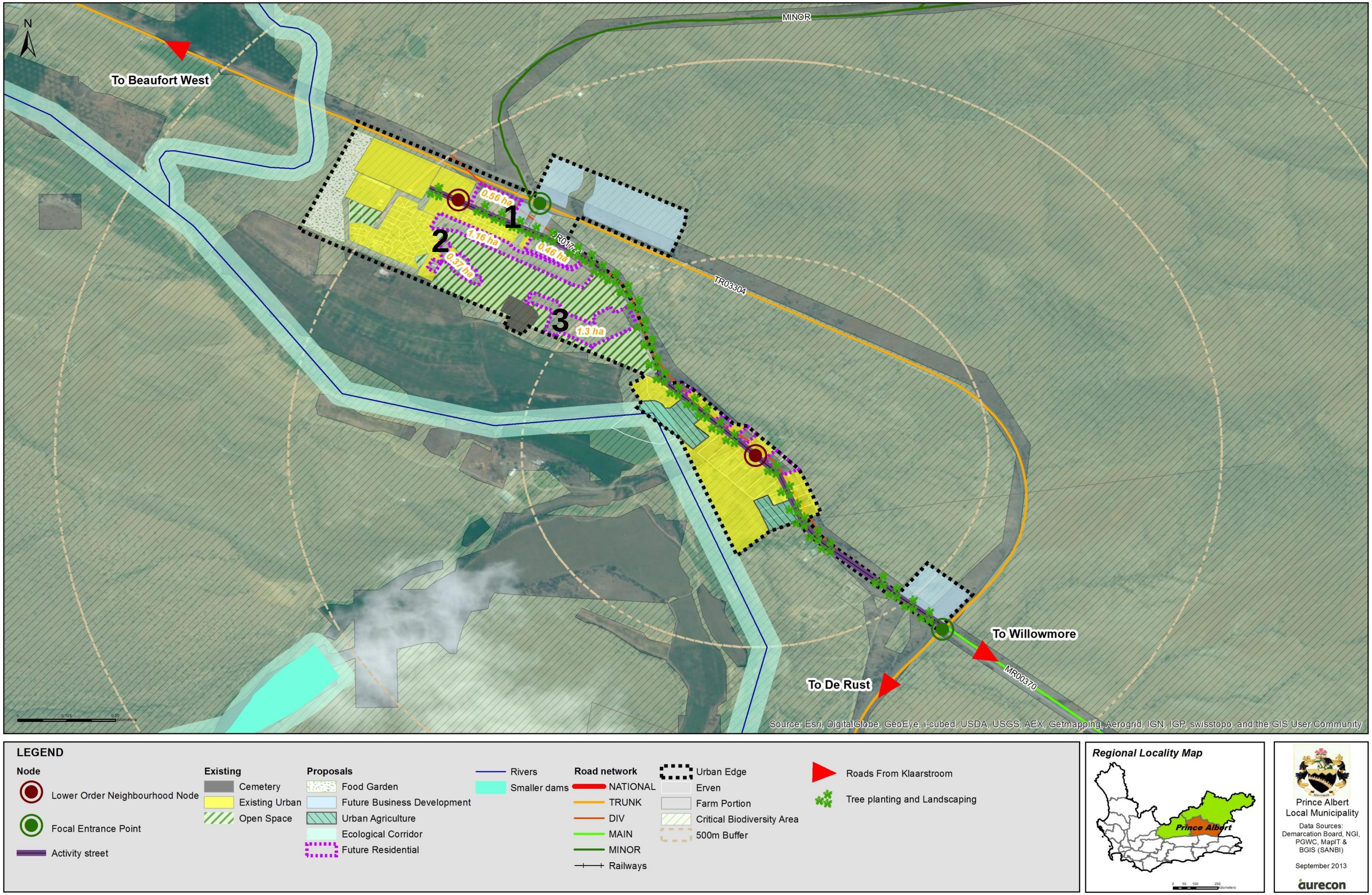
Urban Development

- ± 3.44 hectare is reserved for future residential development which is in accordance with the household growth projections calculated under section 6.3.2.3. The future residential development areas are prioritized as follows: (see **Map 56** below)
  - Priority Area 1, 2 & 3: Ideal for BNG housing to bridge the spatial divide between Klaarstroom south and Klaarstroom north.
- The density of new developments within can be as high as 25du/ha and higher. (In line with the Western Cape SDF.)
- Business and commercial activities should be accommodated along the activity spine and focused towards the identified lower order neighbourhood nodes.
- The area north of the N12 which is earmarked for business development should accommodate a service station and transport related services.
- The 1:50 year flood line should be determined and development should not be permitted within the floodline. Where the drainage system is too small to calculate a floodline, development must be setback at least 32 metres as set out in the NEMA regulations. This ensures that the heads of catchments are kept open allowing for more infiltration and less flooding downstream.

Urban Restructuring

- The development of area 2 and 3 will promote the spatial integration of Klaarstroom south and north.
- The identified urban edge will keep development close to opportunities and will not put unnecessary pressure on current infrastructure.

SPATIAL DEVELOPMENT FRAMEWORK - KLAARSTROOM



Map 56 | Klaarstroom SDF

7.8 Prince Albert Road

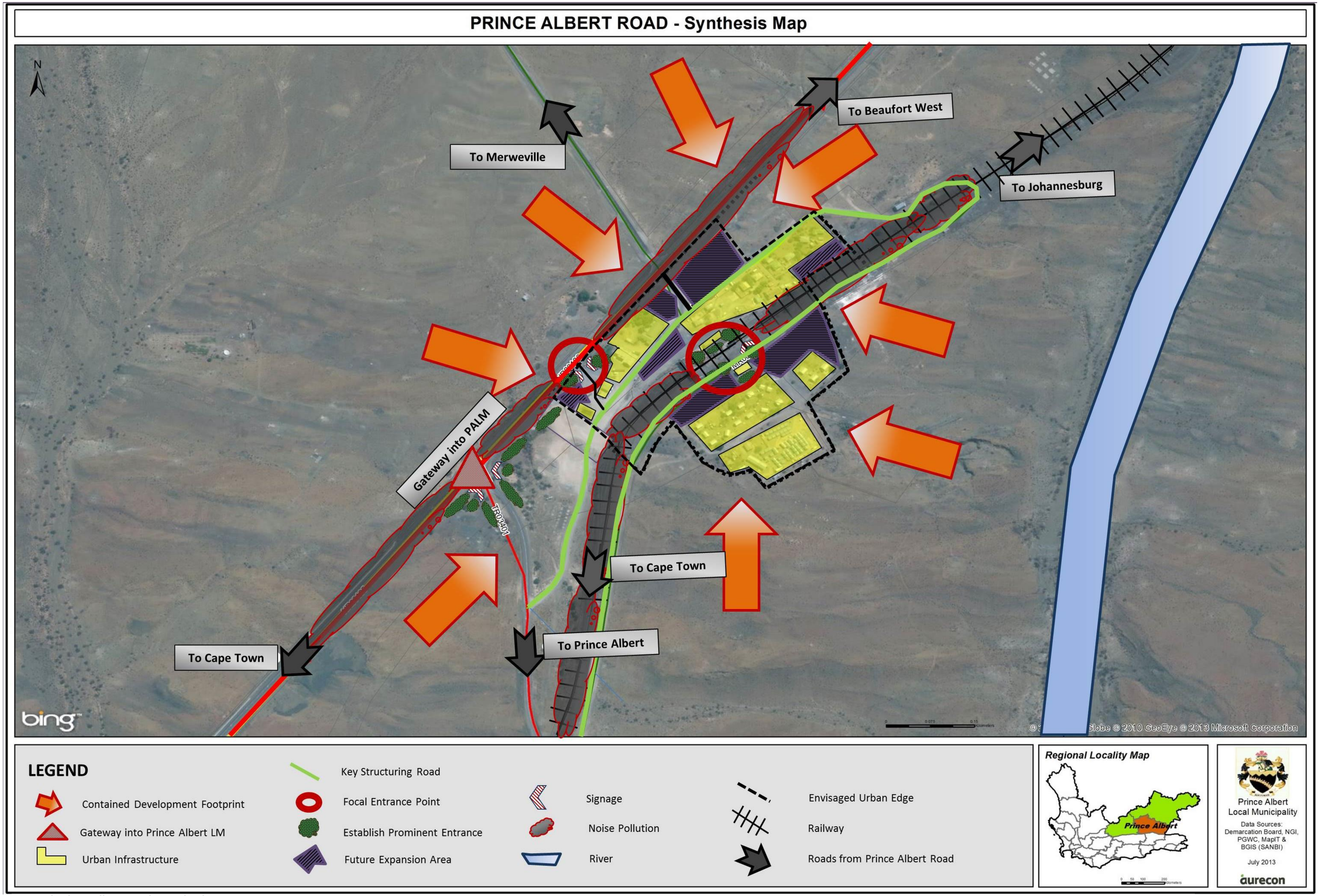
7.8.1 Prince Albert Road: Spatial Analysis, see Map 57 below

Locality

- 85km from Laingsburg, 349 km from Cape Town, 1054 km from Johannesburg.

Urban Quality

- The Prince Albert Road entrance from the N1 lacks a sense of arrival; much can be done to enhance the first impression.
- The railway system and the national road which passes Prince Albert Road causes noise pollution.
- Prince Albert Road mainly consists out of gravel internal roads, a railway station and railway housing.



Map 57 | Prince Albert Road - Synthesis Maps

7.8.2 Prince Albert Road: Spatial Development Framework, see Map 58

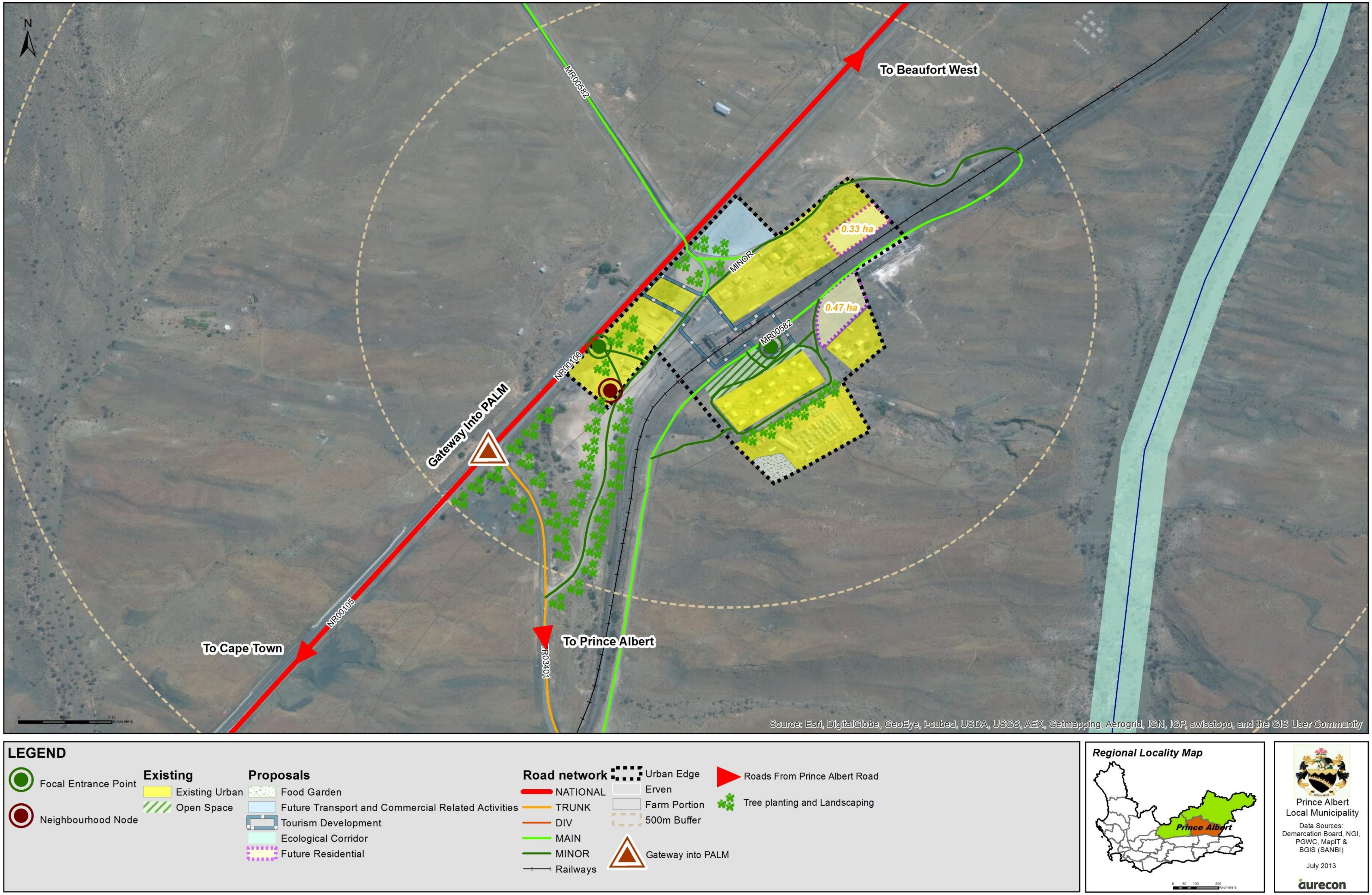
Core landscape areas

- Celebrate the main entrances of Prince Albert Road through landscaping and signage in order to capitalize on the economic opportunity of being situated adjacent to the N1.
- Create a focal entrance point at the railway station though aesthetic upgrading which includes architecture and landscaping.
- Signage and landscaping at the gateway to Prince Albert Local Municipality, which will encourage the passing traffic to visit the LM. This will enable Prince Albert Local Municipality to capitalize on the economic opportunity of the national road that crosses the Local Municipality.
- Tree planting and landscaping of the main structuring element of Prince Albert Road.

Urban Development

- Although future residential development is not encouraged, a total of 0.8 hectare is earmarked.
- The density of new developments can be as high as 25du/ha and higher. (In line with the Western Cape SDF.)
- The areas to the south of the N1 highway which are earmarked for light business should be reserved for transport related commercial activities.
- Business and commercial activities should be accommodated towards the identified lower order neighbourhood nodes.
- The urban edge will keep development close to opportunities and will not put unnecessary pressure on current infrastructure.
- The development of a railway/Anglo Boere War Museum is proposed in the area earmarked for tourism development, see **Map 58** below.

SPATIAL DEVELOPMENT FRAMEWORK - PRINCE ALBERT ROAD



8 Land Use Management

The following system is proposed that would aid the Land Use Management System of the local authority. The system provides “Spatial Planning Categories” (SPC) of land for specific uses, which is displayed geographically on **Map 49**. Up until the development of a Prince Albert Land Use Management Scheme, all application for development can be measured against the respective SPC to measure its suitability for the area.

Table 54 | Proposed Land Use Management System

USE ZONE NO	PROPOSED USE ZONES (X - Primary Use, s1 - Secondary Use 1 , s2 - Secondary Use 2)	MUNICIPAL SDF - Spatial Planning Categories (SPC's)	LOCAL SDF - Spatial Planning Categories (SPC's)	SPC CODE	ABBATOIR	ACCOMMODATION ENTERPRISE	AERODROME	AGRICULTURE	BAKERY	BUILDERS YARD	CAFETERIA	CARAVAN PARK	CEMETERY	COMMERCIAL USE	CONFERENCE FACILITY	CONSERVANCY	CONSERVATION PURPOSES	CREMATORIUM	CULTURAL HERITAGE SITE	DISPENSING CHEMIST	DRIVE-IN RESTAURANT	DRIVE-THROUGH RESTAURANT	DRY CLEANERS	DWELLING HOUSE OFFICE	DWELLING UNIT	ELECTRICAL PURPOSES	FACTORY	FARM SETTLEMENT	FILING STATION	FLAT	FUNERAL PARLOUR	GOVERNMENT PURPOSES	GROUP HOUSING	GUEST HOUSE
1	RESIDENTIAL 1	Urban/ Settlements	Residential 1	F.1f.i															X						X									s2
2	RESIDENTIAL 2	Urban/ Settlements	Residential 2	F.1ii															X						X					X			X	
3	BUSINESS 1	Urban/ Settlements	Business/ Commercial	F.1g/h		X	s2		s2		X			X	X				X	X	X	X	X	X	X	X	s2		s2	X	X	X	X	X
5	SPECIAL			Any																														
6	INDUSTRIAL 1	Industrial	Heavy Industrial	F.2.d	s2				X	X	X			X				s2	X				X		s2	X	X		s2		X			
7	INDUSTRIAL 2	Industrial	Light Industrial	F.2.b	s2				X	X	X			X					X				X		s2	X	s2		s2		X			
8	INSTITUTIONAL	Urban/Settlements	Institutional	F.1d		s2	s2				X		s2		X				X	s2				s2	X					s2			s2	s2
9	AGRICULTURAL	Buffer 2	Extensive Agriculture	D.a	s2		s2	X					s2		s2	X	X		X						X	X		s2						s2
10	HIGH POTENTIAL / UNIQUE AGRICULTURAL	Intensive Agriculture	Intensive Agriculture	E.a	s2		s2	X					s2		s2	X	X		X									s2						
11	MINING & QUARRYING	Industrial	Extractive Industry	F.2.e			s2	X			X					X	X		X															
12	MUNICIPAL/GOVERNMENT	Urban/Settlements	Authority Areas	D.e	X		X	X		X	X	X	X		X	X	X	X	X						X	X				s2		X	s2	
14	CONSERVATION	Buffer 1	Ecological Corridor	C.a			s2	X							s2	X	X		X						X									
15	PUBLIC OPEN SPACE	Buffer 2	Open Space	D.b							X	X				X	X		X						X									
16	RECREATIONAL	Urban/Settlements	Sport/Resorts /Tourism	F.1n							s2	s2				X	X		X			s2												
17	TRANSPORTATION	Surface Infrastructure	Surface Infrastructure	G						X	X			X	X				X						X	X								
18	EXISTING PUBLIC ROADS	Surface Infrastructure	Surface Infrastructure	G															X							X								

USE ZONE NO	GYMNASIUM	HIGH POTENTIAL / UNIQUE AGRICULTURAL	HOME ENTERPRISE	HOTEL	INDUSTRY	INFORMAL BUSINESS	INFORMAL RURAL SETTLEMENT	INFORMAL STRUCTURE	INSTITUTION	INTERNET CAFÉ	KENNELS	KIOSK	LAUNDRAMAT	LIGHT INDUSTRY	LIQUOR ENTERPRISE	LIFESTOCK YARD	MEDICAL CONSULTING ROOMS	MINING	MOBILE DWELLING UNIT	MOTOR GRAVEYARD	MUNICIPAL PURPOSES	NOXIOUS USE	NURSERY	OFFICE	PANEL BEATING	PARKING GARAGE	PLACE OF AMUSEMENT	PLACE OF INSTRUCTION	PLACE OF REFRESHMENT	PRIVATE CLUB
1			s2					s2																				s2		
2			s2																											
3	X		X	X		s2			X	X		X	X	s2	X		X				X		X	X	s2	X	X	X	X	X
5																														
6					X	s2				s2		s2	X	X	s2	s2			s2	X	X	s2	X	X	X	X	s2	s2		s2
7					s2	s2				s2		s2	X	X	s2	s2			s2	s2	X		X	X	s2	X	s2	s2		s2
8	s2					s2			X	s2		s2					s2							s2				X	s2	s2
9		X	s2								s2					s2							s2					s2		s2
10		X	s2								s2					s2												s2		
11		X																X												
12		X				s2			X		X					X			s2		X			X		X		X		s2
14		X																												
15		X				s2															X									
16		X				s2						s2															s2		s2	s2
17		X				s2						s2							s2					X		X			s2	s2
18						s2															X									

USE ZONE NO	PRIVATE OPEN SPACE	PURPOSED ROADS	PROTECTED AREAS	PUBLIC GARAGE	PUBLIC OPEN SPACE	PUBLIC WORSHIP	RAILWAY PURPOSES	RECREATION	RESIDENTIAL BUILDING	RESORT	RESTAURANT	RETIREMENT VILLAGE	SCRAP YARD	SECOND DWELLING UNIT	SEMI-FORMAL RURAL SETTLEMENT	SERVICE ENTERPRISE	SERVICE INDUSTRY	SHOP	SOCIAL HALL	SPAZA	STREET OR ROAD	TAVERN	TAXI HOLDING AREA	TAXI PARKING AREA	TAXI RANK	TEA GARDEN	TELECOMMUNICATION	TRANSPORT USES	VEHICLE SALES LOT	VEHICLE WORKSHOP	WHOLESALE TRADE	BUILDING LINES (STREET BOUNDARY(IES))	MAXIMUM FAR	MAXIMUM HEIGHT	MAXIMUM COVERAGE
1			X			s2								s2						s2												3		2	Single Storey 50% Double Storey 40%
2			X						s2			X		X						s2												3	1.2	4	65
3			X	s2	X	X	X	X	X		X	X		X		X	s2	X	X	X		X	X	X	X	X	X	X	X	s2	s2		2.5	6	80
5			X																													LA	LA	LA	LA
6			X	s2	X	s2	X	s2					X	s2		s2	X	s2	s2			s2	X	X	X		X	X	s2	X	X	3	2.5		75
7			X	s2	X	s2	s2	s2					s2	s2		s2	X	s2	s2			s2	X	X	X		X	X	s2	X	X	3	2.5		75
8	s2		X		X	X		s2	s2		s2	s2		s2		s2		s2	s2							s2	s2					3	2	3	70
9			X			s2								s2					s2	s2							s2					10	LA	LA	LA
10			X			s2								s2						s2							s2					10	LA	LA	LA
11			X																				s2	s2	s2							10	LA	LA	LA
12	X		X		X		X	X	s2			s2		s2					s2				X	X	X		X			X		3	LA	LA	LA
14			X		X									s2																		10	LA	LA	LA
15			X		X			X																			s2					3	LA	LA	LA
16	X		X		X			X		s2	s2								s2							s2	s2					3	LA	LA	LA
17			X				X	s2			s2								s2				X	X	X	s2	X	X				3	1.5	3	70
18		X	X				X										X				X						X								

LA - Local Authority to decide. These Building restriction are proposed for the LUMS and is only an indication.

Note:
Secondary Use 1: Written application to the local authority with a motivating memorandum.
Secondary Use 2: Application to the local authority with a motivating memorandum and advertisements in two official languages for two consecutive weeks in local newspaper/s - with a 28 day notice period for objections - and written approval from all neighbors (sides, diagonal, rear and across the street) to the satisfaction of the local authority.

9 Implementation Framework

Prince Albert's IDP recognised a range of issues that will affect the implementation of the SDF. The areas covered in the IDP are wide raging and link to most development sectors. This SDF goes a long way in addressing these. It does the following:

1. It provides the framework for facilitating integrated development and planning in the municipal area.
2. It creates a basis for interaction and support to affected communities and stakeholders.
3. It prioritises the spatial dimensions of the Municipality's support strategies.
4. It sets the tone for a development-orientated framework of cooperation between public and private sector stakeholders in the municipal area albeit in an environment of very low development intensity.

9.1 Implementation Strategy

The development and implementation of the SDF is built around the powers and functions of the Prince Albert Local Municipality. It is important to recognise that the Municipality can only leverage development within the framework of its powers and functions. The key is that the implementation responsibility for land use and spatial development related matters are vested with the municipality.

9.1.1 Project Criteria Matrix

The project criteria matrix enables the municipality to identify priority areas and projects that will assist in successfully implementing the municipal SDF. The project criteria matrix does not serve as a substitute for the projects listed and prioritized in the IDP. The focus of the project criteria matrix in the SDF is to identify and list spatially related projects and assess them against specifically identified criteria in order to rank and prioritize these projects in spatial planning terms.

The projects were assessed against three main criteria, which include sub criteria's:

- Alignment,

This investigates the alignment of the project with the NDP, WC-SDF and District SDF.

- Sustainability,

This investigates the impact of the project on improved employment, improved economic empowerment, improved economic diversification, improved empowerment, and positive environmental impact.

- Project implementation.

This investigates how easily a project can be implemented and the impact of the project in opening up other opportunities and spin-offs. It looks specifically at: improving settlement restructuring, creating critical paths for other projects, the cost of implementation, ease of implementation, and improvement of infrastructure access.

For each sub category a point out of five was allocated. This meant that each project could be allocated a score out of a possible 65. The top projects were then ranked, from high to low, according

to the score each project obtained. Because of the criteria used to assess the projects, certain types of projects will rank higher than others. This does not mean that this will change the priority of the project as it was assessed in the IDP but it shows the importance of the project in terms of spatial planning and the spatial impact it will have in the municipality.

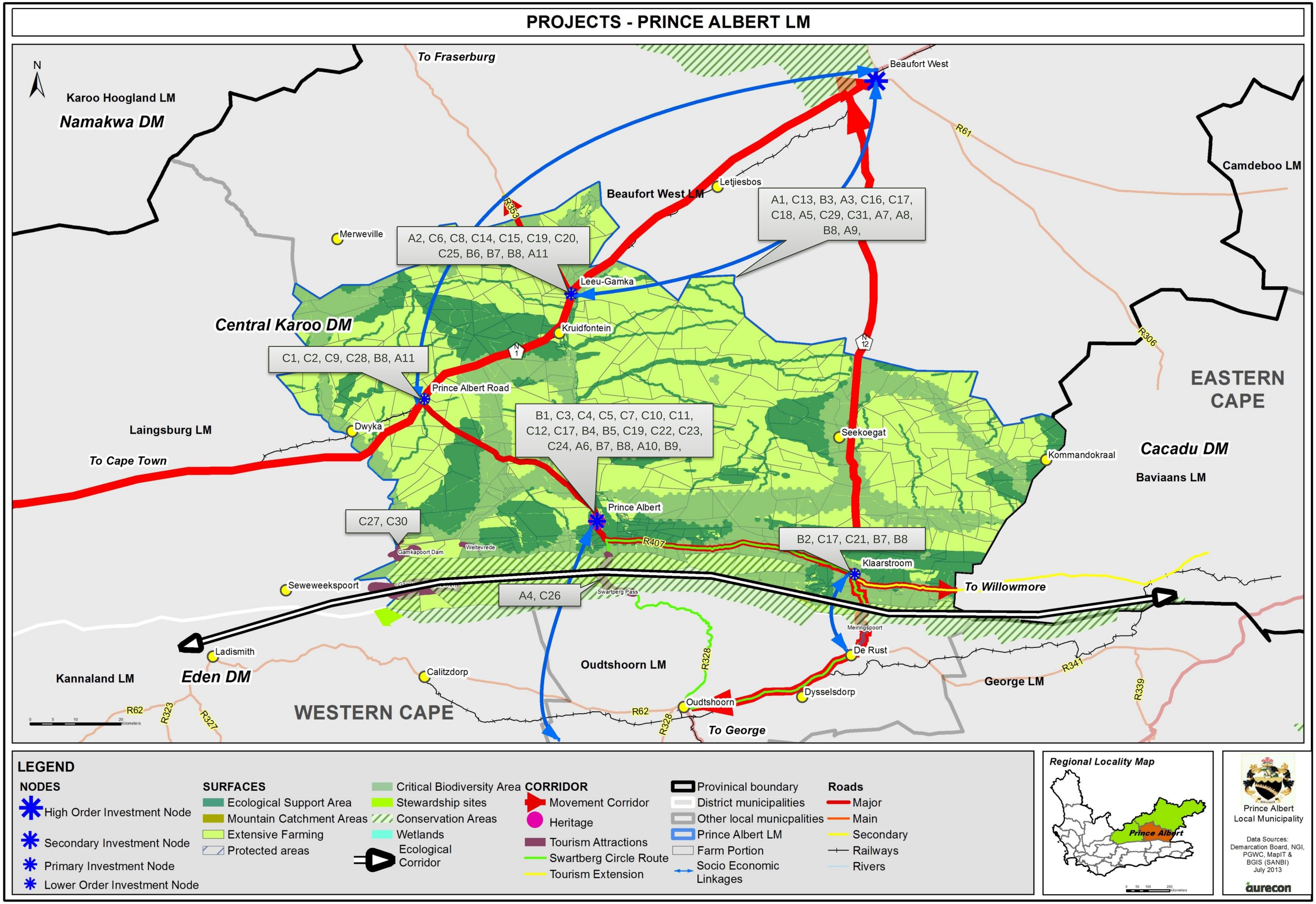
Projects relating to important spatial factors such as access or projects that relate to the strengths of the municipality will rank higher than other projects. This is a result of the rating criteria used. **Table 55** below shows the results and **Map 59** shows the locality of these projects:

Table 55 | Project Criteria Matrix

Rating Matrix							Alignment			Sustainability					Project Implementation					
Project priority no.	Proposal No.: DM SDF Projects	Proposal No.: LM SDF projects	Proposal No.: IDP projects	Policy/Project Name/Ref	Cost Est.	Funding	NDP	WC-PSDF	District SDF	Improves Employment	Improves Economic Empowerment	Improves Economic Diversification	Improves Empowerment	Positive Environmental Impact	Critical Path for other projects	Cost of Implementation	Ease of Implementation	Improves Access to Infrastructure	Improves Settlement Restructuring	Total
1	A1			Water Management Strategy and Plan	R 400 000	DWAF	5	3	5	3	3	3	3	5	5	5	5	5	3	53
2	A2			Waste Water Treatment Works Upgrade (Priority: Leeu Gamka)	R 3 400 000	MIG	5	4	4	2	3	3	3	4	5	5	5	5	4	52
3		B1		Prince Albert Boreholes Capacity Investigation	R 900 000	PALM	5	3	5	3	3	3	3	5	5	5	5	5	2	52
4		B2		Upgrading of the Klaarstroom WWTW and irrigation of effluent	R 3 700 000	MIG PALM	4	3	5	3	3	3	3	4	5	5	5	5	4	52
5			C1	Upgrade of WWTW (Prince Albert Road)	R2 100 00	MIG PALM	4	4	4	3	3	3	3	4	5	5	5	5	4	52
6			C2	Reservoir, including upgrade of WTW (Prince Albert Road)	R 980 000	MIG PALM RBIG	4	5	4	3	2	3	3	4	5	5	5	5	4	52
7			C3	Upgrade of WWTW, including intake and activated sludge (Prince Albert)	R 3 400 000	MIG PALM	4	5	4	3	2	3	3	4	5	5	5	5	4	52
8			C4	Upgrade of WTW, including a larger soda Ash plant, additional storage capacity and filtering. (Prince Albert)	R 11 000 000	MIG PALM RBIG	4	5	4	3	2	3	3	4	5	5	5	5	4	52
9			C5	Bulk Sanitation affluent re-use, including chlorination, reservoir pump station and pipeline for irrigation + upgrade of inflow to WWTW, and reticulation pump stations (Prince Albert)	R 8 000 000	MIG PALM	4	5	4	3	2	3	3	4	5	5	5	5	4	52
10			C6	Bulk Sanitation, WWTW, chlorination, septic tank, and pump station for irrigation of effluent. (Leeu Gamka)	R 3 000 000	MIG	4	5	4	3	2	3	3	4	5	5	5	5	4	52
11			C7	Boreholes and Mains (Prince Albert)	R 2 690 000	RBIG PALM MIG	4	5	4	3	3	3	3	4	5	5	3	5	5	52
12			C8	Upgrade mains and water supply lines, excluding reticulation. (Leeu Gamka)	R 2 500 000	RBIG PALM MIG	4	5	4	3	2	3	3	4	5	5	4	5	5	52
13			C9	Boreholes and Mains, including pump station (Prince Albert Road)	R 1 570 000	RBIG PALM MIG	4	4	4	3	3	3	3	3	5	5	5	5	5	52
14			C10	Internal bulk sanitation, including upgrading of septic tank system to waterborne systems. (Prince Albert)	R 3 340 000	MIG	4	5	4	3	3	3	3	4	5	5	3	4	5	51
15			C11	Community Learning Centre (Prince Albert)	R 5 200 000	PALM	3	4	4	4	3	5	5	3	4	5	5	3	2	50
16			C12	Storage dam (Prince Albert)	R 15 000 000	MIG	4	5	4	3	3	3	3	0	4	5	5	5	5	49
17			C13	Kiosk and upgrade of Transformers (All Wards)	R 7 200 000	PALM	4	5	4	3	3	3	3	0	5	5	5	5	4	49
18		B3		A Storm water Master Plan for Prince Albert Local Municipality	R 400 000	PALM	5	3	5	2	3	3	3	3	5	5	5	3	3	48
19	A3			Crop production subject to water availability	R 1 000 000	DOA	3	3	4	5	5	4	5	5	3	5	5	0	0	47
20			C14	Bulk sanitation connection to previous Spoornet areas. (Leeu Gamka)	R 4 000 000	MIG	4	5	4	3	2	3	3	1	5	5	3	5	4	47
21			C15	Bulk water connection, including mains and supply line to previous Spoornet area. (Leeu Gamka)	R 4 000 000	RBIG PALM MIG	4	5	4	3	2	3	3	1	5	5	3	5	4	47
22			C16	Development of SMME trading hubs (All Wards)	R5 000 000	PALM	3	3	3	5	4	5	5	0	3	5	5	2	4	47
23			C17	Tourism Development Centres (Prince Albert, Klaarstroom and Leeu Gamka)	R1 200 000	DEDAT	3	2	3	5	5	5	5	3	3	5	5	1	2	47

Project priority no.	Proposal No. DM SDF Projects	Proposal No. LM SDF projects	Proposal No. IDP projects	Policy/Project Name/Ref	Cost Est.	Funding	Alignment: NDP	Alignment: WC-PSDF	Alignment: District SDF	Sustainability: Improves Employment	Sustainability: Improves Economic Empowerment	Sustainability: Improves Economic Diversification	Sustainability: Improves Empowerment	Sustainability: Positive Environmental Impact	Project Implementation: Critical Path for other projects	Project Implementation: Cost of Implementation	Project Implementation: Ease of Implementation	Project Implementation: Improves Access to Infrastructure	Improves Settlement Restructuring	Total
24	A4			Maintain gravel road network to ensure agricultural area connectivity and access to heritage areas such as block-houses and the Swartberg Mountain Pass	R 1 000 000	DEDAT PALM	3	3	3	5	4	3	3	3	4	3	5	4	3	46
25			C18	Integrated LED & Tourism Plan/ Strategy & Destination Marketing, SMME Tourism Dev.	R2 500 000	DEDAT PALM	3	4	4	5	4	4	5	2	3	5	5	1	1	46
26		B4		Measurement of the furrow system water supply	R 900 000	PALM	5	3	5	3	2	2	2	4	5	5	5	3	2	46
27		B5		Upgrading of the current waste disposal site in Prince Albert.	R 1 000 000	PALM	3	3	5	2	2	2	2	5	5	5	5	3	3	45
28	A5			Investigate in conjunction with CapeNature natural veld management guidelines and management plan for this region to improve veld carrying capacity in support of local sheep farmers	R 400 000	CapeNature	3	1	4	5	5	3	5	5	4	5	5	0	0	45
29			C19	Storm water upgrade, including drainage and curbing. Adderley Street, North End and Bitterwater.	R 5 000 000	MIG	3	4	4	3	2	3	3	3	3	5	3	5	3	44
30			C20	The upgrade of the furrow pipeline (Leeu Gamka)	R 36 000 000	MIG	4	5	4	2	2	2	2	3	5	2	3	5	5	44
31			C21	Construction of a Clinic/ Health Facility (Klaarstroom)	R 3 000 000	Health Grant	4	5	4	3	2	2	3	0	2	5	5	5	4	44
32			C22	Alternative Energy (Solar) (Prince Albert)	R 25 000 000	PALM	4	1	4	3	3	3	3	4	4	3	5	3	3	43
33			C23	Business Hives to development an environment or space for upcoming entrepreneurs, create employment opportunities & contribute to the economy. (Prince Albert)	R 8 000 000	DEDAT PALM	3	2	3	5	5	5	5	0	3	5	3	2	2	43
34			C24	Community Tourism Plan (Prince Albert Area)	R 1 000 000	DEDAT PALM	3	2	4	5	3	4	3	3	4	5	5	1	1	43
35			C25	Facilitate the construction of an Early Childhood Development Centre that's safe & accessibly (Leeu Gamka)	R 2 000 000	DSD	5	4	3	4	3	5	3	3	1	5	3	3	1	43
36			C26	The Swartberg Pass Project, a community-based job creation initiative under the auspices of the Central Karoo's Strategic Framework for Economic Regeneration.	R 7 000 000	DEDAT PALM	4	2	3	5	5	4	5	0	3	5	5	1	1	43
37			C27	Eco-cultural adventure tourism in the rural areas which link up with tourism route 66 (Pont over Gamka Dam)	R 5 000 000	DEDAT PALM	4	2	3	5	4	5	4	3	3	5	3	1	1	43
38			C28	Agri Tourism Hub (Prince Albert)	R 1 500 000	DOA DEDAT	3	2	3	5	5	5	4	0	3	5	5	1	2	43
39			C29	Integrated Waste management plan (All Wards)	R 200 000	PALM	3	4	4	3	2	2	2	4	4	5	5	3	2	43
40			C30	Develop a resting or eco park, with overnight facilities (Gamkapoort development)	R 4 500 000	-	5	2	3	5	3	4	3	3	2	5	5	1	1	42
41			C31	Development of an Electricity Master Plan	R 200 000	PALM	5	5	5	2	2	2	2	0	5	5	5	2	2	42
42		B6		Close down the illegal waste disposal site in Leeu Gamka, provision of a temporary Waste Transfer Station, an EIA and the development of a new waste disposal site	R 3 000 000	PALM	3	3	5	2	2	2	2	5	3	5	3	3	3	41
43	A6			Providing technical support to sustain and maintain key heritage areas in Prince Albert	R 500 000	DEDAT PALM	4	2	3	2	2	4	2	3	4	5	5	2	3	41
44	A7			The impact of mining on infrastructure must be considered as part of a multi-pronged and multi-disciplinary investigation.	R 500 000	DEADP	4	2	3	2	3	3	3	5	4	5	5	1	1	41
45	A8			Implement landscaping and urban design elements in targeted rural settlements where infrastructure need, tourism and development potential has been identified	R 3 000 000	DEADP	3	4	2	3	2	2	4	3	2	5	5	2	3	40
46		B7		Provision of sidewalks in Prince Albert, Leeu Gamka and Klaarstroom	R 1 200 000	DTPW	3	4	3	2	2	2	2	3	2	5	3	4	3	38
47		B8		Celebrate entrance of town/settlement and the Gateways to Prince Albert municipal	R 500 000	PALM	3	4	3	3	1	1	1	3	3	5	5	1	3	36
48	A9			The implementation of the District Mobility Strategy.	R 500 000	DTPW	3	3	3	3	1	1	2	0	2	5	5	4	3	35

				Rating Matrix																
							Alignment			Sustainability					Project Implementation					
Project priority no.	**Proposal No.: DM SDF Projects**	**Proposal No.: LM SDF projects**	**Proposal No.: IDP projects**	**Policy/Project Name/Ref**	**Cost Est.**	**Funding**	**NDP**	**WC-PSDF**	**District SDF**	**Improves Employment**	**Improves Economic Empowerment**	**Improves Economic Diversification**	**Improves Empowerment**	**Positive Environmental Impact**	**Critical Path for other projects**	**Cost of Implementation**	**Ease of Implementation**	**Improves Access to Infrastructure**	**Improves Settlement Restructuring**	**Total**
49	A10			Investigation on obtaining national protection for heritage cemetery sites in Prince Albert	R 100 000	PALM	3	2	3	2	1	1	3	5	3	5	5	1	1	35
50	A11			Investigate and identify rural settlements along the N1 for possible railway heritage tourism.	R 200 000	PALM	3	3	2	3	3	4	3	0	2	5	4	1	2	35
51		B9		Formalise the conservation status of the Robert Gordon Koppie to a Protected Area	R 50 000	DEADP	3	3	3	1	1	1	3	5	2	5	5	1	2	35



Map 59 | Locality of the Identified Projects

9.1.2 Sustainable development

Prince Albert Local Municipality is clearly under financial and institutional stress. The projects put forward are interventions that from a spatial planning point of view will contribute to the development of the area. Existing

9.2 Implementation of SDF projects

The SDF in its totality guides and aids decision-making on spatial development. However, in the processes of analysis and assessment a number of issues (that was not already identified in the IDP or CKSDF) were identified that might go beyond the scope of the SDF itself and needs further attention from the Council. The following issues need specific attention:

1. **Prince Albert Water Capacity Investigation**

The water furrows of Prince Albert currently provides sufficient water because of high rainfall, this could however change drastically during a drought period. Therefore the Prince Albert boreholes need to be investigated i.t.o.:

- The availability of water meters?
- The functioning of the water meters?
- Are there borehole data loggers in place?
- What is the capacity of the boreholes?

2. **Upgrading of the Klaarstroom WWTW and irrigation of effluent**
3. **A Stormwater Master Plan for Prince Albert Local Municipality**
4. **Flow meter to determine the flow of water in the furrow system**
5. **Upgrading of the current waste disposal site in Prince Albert**
6. **Close down the illegal waste disposal site in Leeu Gamka, provision of a temporary Waste Transfer Station, an EIA and the development of a new waste disposal site**
7. **Provision of sidewalks in Prince Albert, Leeu Gamka and Klaarstroom**
8. **Celebrate entrance of town/settlement and the Gateways to Prince Albert municipal**
9. **Formalise the conservation status of the Robert Gordon Koppie to a Protected Area**

10 Monitoring and evaluation

The SDF is the Council's response to the expected spatial changes in the local development environment. Through the IDP the Council has set itself objectives and targets for development. The SDF provides a framework for the Council to respond to development. The key consideration is that the Council is one of a multitude of players in the environment and does not control development. It is therefore appropriate for the Council to monitor development in its broadest form, but then specifically in terms of:

1. The incorporation of the recommended projects into the IDP and subsequently into the budget and the implementation thereof.
2. The impact of development on the biophysical environment. To this effect, the Council must ensure that the necessary EIA's are done when and where appropriate.
3. Settlement changes and changes in settlement patterns must be monitored. This also applies to assessing the impact of Council decisions of urbanisation, migration and settlement.
4. The impact of Council policies and decisions on the spatial integrity of the environment as outlined and described in the SDF

These four critical aspects need to be assessed annually as part of the IDP review of the Council. There is no need to create any extraordinary measures outside the day-to-day operation and management activities of the Council to meet the strategic objectives as spelled out in this report.

10.1 Municipal officials

The municipal officials of Prince Albert Local Municipality who had been well informed of the SDF should convene on a regular basis to discuss implementation of the SDF.

The three main aspects that need to be addressed are the following:

- Municipal decision making based upon the spatial directives of the SDF for capital and operational projects.
- Development of a strategy to implement the SDF.
- Land Use Management controls and procedures affected by the SDF.

Monitoring of the implementation of the SDF needs to be specifically allocated to persons within the Committee.

10.2 SDF Cycles

The SDF should provide a framework with a 20 year horizon. Despite this fact, the SDF should be reviewed every 5 years in line with the IDP cycle. Annual revisions of the whole SDF are not required. A complete revision may be required after a 10 year period. Annual revisions of the implementation plans may be required, based on the outcomes and evaluation of the SDF. Criteria can be set for revisions for instance new information that had been introduced i.e. sector plans etc.

10.3 Project prioritisation and budget allocation process



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Appendix A

Public Participation

Public Participation

All stakeholders that were invited to participate in the formulation of the SDF are summarized in the table below. The table gives a brief summary of the different types of public engagements undertaken, the participants who attended the sessions and the outcomes thereof.

Table 56 | Community Participation Sessions

Type of Engagements	Participants	Outcomes
Council Meeting	• Prince Albert Local Municipality: Municipal Manager • Prince Albert Local Municipality: Councillors • DRDLR • Department of Environmental Affairs and Planning	• Agreed on the Public Participation Process. • Identified spatial issues
Discussions via e-mail and/or telephonic	• Neighbouring Municipalities • Central Karoo District Municipality	• Identified cross-border issues • A identified vision for the interface zones and boundaries; • Access to documentation that could be of assistance
Public Participation Workshops	• Prince Albert Local Municipality representatives • Community members from Ward 1-4 • Representatives from the Cultural Foundation	• Identified spatial issues • Identified a spatial vision for Prince Albert Local Municipality • Access to relevant information
Government Departments	• Relevant Government Departments	• A contact person from each of the departments who could provide inputs throughout the SDF compilation process

Community Participation

Council Meeting

The first level of preparation was to consult with the Prince Albert Local Municipality regarding the relevant dates for the Public Participation workshops and to identify spatial issues.

Notices were distributed by Prince Albert Local Municipality to inform the community of the workshops. The following venues and dates were confirmed for the first round of Public Participation Workshops.

Table 57 | "Issues & Vision" Workshops Schedule

Date	Hosting Ward	Venue	Time
09 April 2013	Ward 1	Leeu Gamka Community Hall	18:00
10 April 2013	Ward 4	Klaarstroom Community Centre	18:00
11 April 2013	Ward 2 & 3	Sydwill Williams Hall – Prince Albert	18:00

Issues

The council identified the following issues that they felt needed addressing:

Table 58 | Issues identified by the council of Prince Albert Local Municipality

Issues	
Build Environment	
❖ The previous delineation of the Prince Albert urban edge does not make provision for the current high demand for erven in Prince Albert.	❖ The current shortage of erven earmarked for business purposes
❖ The municipality is currently in need of an enforceable Land Use Management document.	❖ The subdivision of agricultural land/erven.
❖ A need for a retirement village.	

Public Participation Workshops

The purpose of the public participation workshops were to get in touch with the local community and its specific needs. The workshops facilitated a process where there was no pre-supposed ideas projected to the community, but just an honest picture of the conditions which the community face.

In terms of the vision, the community was asked to picture an ideal municipality in the future. A vision with a spatial element that makes it unique and which represents the desires of the community for the future. The elements identified at the workshops will be summarized and condensed to a spatial vision for the broader municipality.

"Issues and Vision" Workshops Outputs

Ward 1

The workshop was started with a Power Point Presentation explaining: what an SDF is and the different project phases (discussing Phase 2 in detail). The attendees were then divided into groups in order to identify their issues and vision for Leeu Gamka and the Prince Albert Municipal area.

A total of 36 delegates attended the workshop which included representatives from Prince Albert Local Municipality, the ward councillor, ward committee members, Leeu Gamka community members, etc. The duration of this workshop was ± 2h30m.

Issues

Ward 1 identified the following issues that they felt needed addressing:

Table 59 | Issues identified in Ward 1

Issues	
Socio- Economic Environment	
❖ High rate of unemployment	❖ The unreliability of the Leeu Gamka SAPS
❖ The unsustainable economic conditions of Leeu Gamka	❖ The deaths of pedestrians crossing the N1
❖ The lack of a doctor on a daily basis	❖ The high taxi fares for transport to Beaufort-West
❖ The high rate of HIV infections	❖ The Lack of entertainment for the community
❖ The high rate of violence against woman	❖ The high rate of teenage pregnancies
❖ The increase in alcohol and drug abuse	
Bio-Physical Environment	
❖ Erosion caused by storm water	❖ Mountain areas dividing the settlement in two
❖ The area that is prone to drought	❖ The lack of water to accommodate future developments
Build Environment	
❖ A lack of available commonage ground for small scale farming	❖ The lack of Housing to accommodate the internal growth of Bitterwater
❖ Dust caused by the unpaved streets	❖ The lack of an affordable Public transport system
❖ The lack of street lights	❖ The need for business erven adjacent to the N1
❖ The lack of speed bumps	❖ The lack of overnight facilities in Leeu Gamka
❖ The settlements groundwater dependency	❖ The lack of landscaping at the entrances of Leeu Gamka

Issues	
❖ The lack of GAP[158] Housing	❖ The poor visibility of the ambulance station at night
❖ The electricity system needs to be upgraded	❖ The need for additional reservoirs
❖ The need for the following facilities were identified: • A day hospital • A truck stop • A Thusong Service Centre • A swimming pool • A hospice • A post-office • A fire-brigade • A shopping centre • Banking facilities	❖ The sewer system needs to be upgraded

Vision

When asked to picture an ideal municipality in the future, the below-mentioned elements were identified. Again, no format or pre-supposed ideas were mentioned and the community was free to express any desires for an ideal future in their area. The vision holds a spatial element that makes it unique. The vision will represent the desires of the community for the future.

The below-mentioned elements will be summarized and condensed to a spatial vision for the broader municipality.

Table 60 | Leeu Gamka's Ideal Future

Ideal Future	
❖ Work opportunities for all	❖ Housing for all the Leeu Gamka residents
❖ Increased visibility of Leeu Gamka along the N1 route	❖ To utilize the economic opportunities that can be created due to Leeu Gamka's locality adjacent to the N1
❖ Improved conditions of the current facilities	❖ All infrastructure in an operational condition

Ward 2 & 3

This workshop was also started with a Power Point Presentation explaining: what an SDF is and the different project phases (discussing Phase 2 in detail). The attendees were then given the opportunity to identify their issues and vision for Prince Albert and the Prince Albert Municipal area.

A total of 13 delegates attended the workshop which included representatives from Prince Albert Local Municipality, the mayor, the ward councillor, ward committee members, members of the Cultural Foundation, representatives from the Fransie Pienaar Museum, Prince Albert community members, etc. The duration of this workshop was ± 1h45m.

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[158] **"Gap housing" is a term that describes the shortfall, or 'gap' in the market between residential units supplied by the state and houses delivered by the private sector.**

Table 61 | Issues identified in Ward 2 & 3

Issues	
Socio-Economic Environment	
❖ The high unemployment rate	❖ The existing legislation and by-laws are not properly enforced.
❖ Lack of protection of the historical areas of Prince Albert	❖ The new minimum wages will lead to an increased unemployment rate
❖ Lack of up to date reliable demographic data to guide decision making	
Bio-Physical Environment	
❖ Fracking could potentially be undertaken but no planning is done in terms of if and when it would occur.	❖ No scientific evaluation of the carrying capacity of the Dorps River catchment has been undertaken which should determine the ultimate Vision and growth of the town.
❖ The Robert Gordon Koppie at present has no formal protection against development.	❖ The town's water resources are finite, and should become the measure of the town's ultimate growth.
❖ A need to determine the 1:50 year flood line.	
Build Environment	
❖ Prince Albert reflects the common dualistic "apartheid" urban spatial planning pattern, a product of the previous regime planning methods.	❖ The need for innovative methods to connect the northern and southern ends of Prince Albert.
❖ The storage and management of water.	❖ The lack of proper storm water management
❖ Lack of business, industrial and commercial erven.	❖ The lack of middle income housing
❖ The old infrastructure of Prince Albert	❖ The need for GAP housing
❖ Upgrading of the current recreational facilities	❖ The refuse site needs to be expanded
❖ The need for the following facilities for the northern section of Prince Albert: • Banking facilities • A post-office	

Vision

When asked "What makes Prince Albert unique?" the below-mentioned elements were identified.

b) It's an agriculture town with a lot of economic potential.
c) The town can be described as a "Sagte" Karoo Town of historical significance.
d) Prince Albert is a town with rich architectural heritage.
e) The linear distribution of shops and services is in fact the essential character of the town.

Furthermore the attendees formulated the following vision statement for Prince Albert Local Municipality:

"Celebrate the historical character of Prince Albert while enabling a better life for all."

Additionally it was mentioned that a form of nodal development is already evident at the northern end of Church Street around OK Spar, the BP service station, Home Hardware, the Thusong Centre and Badisa. It was suggested that this location should be seen as a potential node and should be incorporated as part of the SDF.

Ward 4

This workshop was also started with an introduction explaining: what an SDF is and the different project phases (discussing Phase 2 in detail). A map of Klaarstroom was presented which assisted the attendees to identify their issues and vision for Klaarstroom and the Prince Albert Municipal area.

A total of 6 delegates attended the workshop which included Prince Albert Municipal representatives, the ward councillor, Klaarstroom community members, etc. The duration of this workshop was ± 1h30m.

Table 62 | Issues identified in Ward 4

Issues	
Socio-Economic Environment	
❖ The need for a doctor on a more regular basis.	❖ The need for a public transport system.
Bio-Physical Environment	
❖ The need for public open spaces.	❖ The possible pollution of the river due to the adjacent pig farmers.
Build Environment	
❖ Shortage of water supply for small scale farming on the commonage ground, on the northern side of the N12.	❖ The lack of erven for the development of churches.
❖ The need for proper storm water management systems	❖ The need for a fuel station/truck stop adjacent to the N12
❖ The need for GAP housing	

Vision

When asked to picture an ideal municipality in the future, the elements in the table below were identified.

Table 63 | Klaarstroom's Ideal Future

Ideal Future	
❖ Work opportunities for all	❖ Housing for all

Inputs from the Neighbouring Municipalities & Central Karoo District Municipality

The Central Karoo District Municipality and Beaufort West Local Municipality is currently in the process of compiling their SDF's, the inputs gathered during their "Issues and Vision" workshops with cross-border implications will be taken into account. The rest of the neighbouring municipalities were contacted telephonically and/or via e-mail for their inputs with regards to cross-border issues and their vision in term of what should happen on the boundary and interface zones. The inputs received are summarized in the table below:

Table 64 | Inputs from the CKDM & Neighbouring Municipalities

Central Karoo DM (Includes Prince Albert Local Municipality, Laingsburg Local Municipality and Beaufort West Local Municipality)	
Issues	
❖ Limited employment opportunities for low skilled occupations. ❖ No formal protection and conservation of biodiversity areas in terms of a Protected Area. ❖ The District's river system is degraded in places and remains under threat. ❖ Rehabilitation is required to improve water quality and ecosystem status. ❖ The possibility of fracking within the District will need proper Environmental Management Planning to ensure the well-being of groundwater. ❖ The level of mobility within the District Municipality is considered relatively low. ❖ Climate change is considered one of the District's most important challenges. According to predictions, the District temperature is to rise in future which may have a devastating effect on the biodiversity in the region.	❖ The District has very little arable land (around 1% of its total land area) and pressures for urban development are placing tremendous pressure on these agricultural resources. ❖ There is a growing interest in the mining of uranium and shale gas in the District Municipality. There is particularly significant concern regarding the environmental impact of shale gas extraction by means of fracking. The fracking process uses considerable amounts of water and current water supplies may not be able to meet the demand. Furthermore, there is a threat of ground water contamination as a result of chemicals added to the fracking process. ❖ The provision of sufficient water supplies during periods of drought remains a concern for the District.
Spatial Vision: "Working Together in Sustainable Spatial Development and Growth" (Not finalized yet)	
Beaufort West Local Municipality	
Cross-border Issues	
❖ Nothing has been done for mining uranium. ❖ The N1 was bumper to bumper over Christmas the need to divert the trucks to alleviate this	There is an FET College in Beaufort West but no accommodation for students.

problem should be considered.
The following elements were regarded as unique to the municipality:
❖ The air is clear and there is lots of space.
Kannaland Local Municipality (A request for inputs was send to Mr Darries)
No feedback to date
Oudtshoorn Local Municipality (A request for inputs was send to Mr Easters and Mr Carelse)
No feedback to date
Baviaans Local Municipality (A request for inputs was send to Mr Arends and Mr Terblanche)
No feedback to date

Government Departments

An introduction letter was sent to all the relevant government departments. This letter introduced the Prince Albert Local Municipality SDF project, requests any information that could be of value throughout the SDF compilation process and requests a contact person from the department which will attend SC meetings in future. To date only the following four departments responded on the letter:

Table 65 | Feedback from Government Departments

Government Department	Official assigned to this project
Department of Health	Mr Hendri Basson, Dr H Schumann and Dr T. Marshall
Department of Human Settlements	Mr Louis Welgemoed
Department of Agriculture	Mr Dudley Adolph
Department of Water Affairs	Mr John Roberts and Mr Deugald Jephtha
Department of Education	Mr Thembilizwe Hawker
Department of Economic Development and Tourism	Mrs Vanessa Frantz
Department of Environmental Affairs and Development Planning	Mrs Tania de Waal and Mr Allan Rhodes

Aurecon South Africa (Pty) Ltd
1977/003711/07
Aurecon Centre
1 Century City Drive
Waterford Precinct
Century City
Cape Town
7441

PO Box 494
Cape Town
8000
South Africa

T +27 21 526 6029
F +27 21 526 9500
E capetown@aurecongroup.com
W aurecongroup.com